Environment Canada

2009–2010 Estimates

Part III – Departmental Performance Report

Jim Prentice
Minister of the Environment

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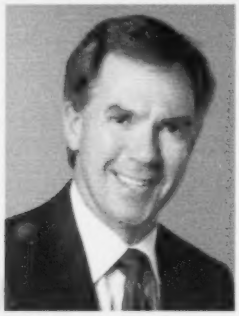
Minister's Message



I am pleased to present the *2009 2010 Departmental Performance Report* for Environment Canada. This report reflects the progress made towards achieving the Department's Strategic Outcomes and the priorities identified in Environment Canada's *2009 2010 Report on Plans and Priorities.*

In these economic times, it is a greater challenge than ever to strike the right balance between environmental integrity and economic prosperity. In addressing the core issues on the Department's agenda, we have engaged with stakeholders and worked closely with our provincial and territorial partners to ensure that our policy work is aligned with the realities they may confront regionally, domestically and internationally.

This consultative approach also informed the way in which the Government committed financial support for new and existing environmental programs. The result has been demonstrable progress for the environment and the economy through legislation and regulation, science, enforcement partnerships and service delivery to Canadians.

Climate change remained a focal point for policy over the past year. A major achievement was the successful negotiations of the *Copenhagen Accord*, which Canada supports as a significant breakthrough in the global effort to address climate change. In January 2010, Canada committed under the Accord to reduce our emissions by 2020 to 17% below 2005 levels. In addition, as part of Canada's commitment to provide its fair share of fast-start financing under the Accord, we announced a $400 million contribution for 2010-2011 to help developing countries address climate change.

Over the past year, the Department moved forward on regulations to reduce greenhouse gas emissions from passenger vehicles and trucks, cut greenhouse gas and air pollution emissions from coal-fired electricity plants, develop a national standard for municipal wastewater treatment, and reduce emissions from volatile organic compounds which contribute to smog.

Environment Canada also delivered on its pledge to improve biodiversity and water quality, as well as to protect Canadians from air pollution and toxic substances. It demonstrated leadership on initiatives such as the Clean Air Agenda, the Federal Contaminated Sites Action Plan, the Chemical Management Plan, and the Federal Sustainable Development Strategy.

In the past year, with the passage of the *Environmental Enforcement Act*, the Department fortified its enforcement of environmental laws and regulations. The Department showcased its state of the art innovative technologies with its exceptional delivery of the official weather services and forecasts to the 2010 Winter Games, and Canadians benefitted from the expansion of the Air Quality Health Index program to more communities, helping Canadians take action to protect their health as it relates to air quality.

These are some of the highlights from the last year that represent Environment Canada's ongoing commitment to stewardship and the protection of Canada's environment. Over the coming year, we will continue to build on this foundation of accomplishment to ensure Canada's environmental and economic excellence.

The Honourable Jim Prentice, P.C., Q.C., M.P.
Minister of the Environment

Section I: Departmental Overview

Raison d'être

A number of acts and regulations provide the Department with its mandate and allow it to carry out its programs. Under the *Department of the Environment Act*, the powers, duties and functions of the Minister of the Environment extend to and include matters relating to:

- the preservation and enhancement of the quality of the natural environment, including water, air and soil quality;
- renewable resources, including migratory birds and other non-domestic flora and fauna;
- water;
- meteorology;
- the enforcement of any rules or regulations made by the International Joint Commission relating to boundary waters; and
- the coordination of the policies and programs of the Government of Canada respecting the preservation and enhancement of the quality of the natural environment.

Additional authorities are provided in other acts and regulations administered by the Department, including the *Species at Risk Act*, the *Canadian Environmental Protection Act, 1999* and the *Federal Sustainable Development Act*. In addition to the statutes administered by the Minister, Environment Canada has responsibilities under other statutes, including the *Canadian Environmental Assessment Act*, either as a federal or as a responsible authority. For details on departmental legislation and regulations, please see www.ec.gc.ca/EnviroRegs.

During the fiscal year under review, the Department undertook the development of new enforcement legislation aimed at strengthening the enforcement of wildlife laws through increased fines and new enforcement tools. The new *Environmental Enforcement Act* received Royal Assent in June 2009.

Environment Canada is also a key partner with other federal departments, where statutes such as the *Arctic Waters Pollution Prevention Act*, *Canada Foundation for Sustainable Development Technology Act*, and *Marine Liability Act* provide Environment Canada with secondary or shared responsibility for the successful execution of other federal departments' mandates.

In addition to the legislative and regulatory responsibilities, Environment Canada has certain fiduciary obligations related to, for example, contaminated sites.

Strategic Outcomes and Program Activity Architecture

The Program Activity Architecture (PAA) is an inventory of a Department's programs, and is therefore a basis for performance measurement as appears in the Departmental Performance Report.[1] Environment Canada's 2009–2010 PAA included three Strategic Outcomes that supported the Government of Canada's priority of **a clean and healthy environment**:

- Canada's natural capital is restored, conserved and enhanced;
- Weather and environmental predictions and services reduce risks and contribute to the well-being of Canadians; and
- Canadians and their environment are protected from the effects of pollution and waste.

A fourth Strategic Outcome supported the Government of Canada's priority of **strong economic growth**:

- Canadians benefit from the responsible development of the Mackenzie gas resources.

The Department's 2009–2010 Strategic Outcomes and PAA, presented next, shows how programs are organized in the Department.

[1] Note that the Environment Canada's PAA for 2010–2011 has been changed significantly from that used for 2009–2010.

Environment Canada 2009–2010 Program Activity Architecture

Canada's natural capital is restored, conserved and enhanced	Weather and environmental predictions and services reduce risks and contribute to the well-being of Canadians	Canadians and their environment are protected from the effects of pollution and waste	Canadians benefit from the responsible development of the Mackenzie gas resources	
Biodiversity and Wildlife Program	Environmental Science and Monitoring Program	Chemicals Management Program	Mackenzie Gas Project	Internal Services
Wildlife Program	Weather and Environmental Monitoring Program	Risk Assessment Program		Governance and Management Support
Land and Landscapes Program	Weather and Environmental Prediction Research Program	Risk Management Program		Resource Management Services
Water Program	Emerging Environmental Prediction and Monitoring Strategies Program	Risk Mitigation Program		Asset Management Services
Aquatic Ecosystems Program	Weather and Environmental Prediction Program	Legislation and Information Program		
Ecosystems Initiatives Program	Weather and Environmental Warnings And Forecasts Program	Pollutants and Greenhouse Gas Information Program		
Priority Ecosystem Initiatives Program	Weather and Environmental Information Services Program	Legislative and Regulatory Strategies and Practices Program		
Assessment and Ecological Monitoring Program	Evolving Services and Policy Program	Clean Air Program		Legend
Outreach Program	Atmospheric Change Adaptation Strategies Program	Air Priorities Program		Strategic Outcomes
		Industrial Sector Emissions Program		Program Activities
		Transportation Sector Emissions Program		Program Sub-Activities

Program Activity: Internal Services

Commencing in the 2009–2010 Estimates cycle, the resources for Program Activity: Internal Services are displayed separately from other Program Activities (see Section II); they are no longer distributed among the remaining Program Activities, as was the case in previous Main Estimates. This change, therefore, affects the comparability of spending and FTE information by Program Activity between fiscal years.

In-year Changes to Environment Canada's 2009–2010 Program Activity Architecture

The table below shows 2009–2010 actual spending following in-year change of Mackenzie Gas Project into Environment Canada's Program Activity Architecture.

Program Activity	Total ($ millions)
Biodiversity and Wildlife Program	138.1
Water Program	87.4
Ecosystems Initiatives Program	35.4
Environmental Science and Monitoring Program	105.8
Weather and Environmental Prediction Program	90.9
Chemicals Management Program	120.1
Legislation and Information Program	50.1
Clean Air Program	109.5
Mackenzie Gas Project*	6.5
Internal Services	351.3
Total Actual Spending	**1,095.1**

Totals may differ between and within tables due to rounding of figures. Excludes services received without charge and respendable revenues.

* Responsibility for the Mackenzie Gas Project (MGP) has been transferred to the Minister of the Environment from the Minister of Industry, effective October 2008 by Order in Council. Changes to Parliamentary Authorities for this initiative occurred through Supplementary Estimates in 2009–2010. As such, Environment Canada is responsible to report on the Mackenzie Gas Project within its 2009–2010 unaudited financial statements. It is also important to note that this transfer did not affect the financials (planned and actual) or the expected results and performance of other Program Activities.

Performance Highlights for 2009–2010

Environment Canada made overall progress across the range of its responsibilities and priorities for 2009–2010. Highlights from the year follow.

Environment Canada represented the Government of Canada at the negotiations leading up to, and at, the 15th Conference of the Parties (CoP 15) to the United Nations Framework Convention on Climate Change, held from December 7 to December 18, 2009 in Copenhagen.

The Copenhagen Accord represented a major step towards achieving real progress on climate change and was fully consistent with Canada's policy on climate change. The Accord includes both commitments by all major economies to take significant action to reduce emissions, as well as provisions for financing to support mitigation and adaptation efforts in developing countries. These include a collective commitment by developed countries to provide resources approaching $30 billion between 2010 and 2012. The Government announced a $400 million investment beginning in fiscal year 2010–2011 as Canada's first step in delivering its fair share of the Accord's commitment by advanced economies to provide financing assistance to developing countries to address climate change. The Copenhagen Accord reflects key Canadian negotiating principles and objectives on a wide range of issues including mitigation, adaptation, finance and technology. In January 2010, Canada submitted an economy-wide emissions target for 2020 of 17 percent below 2005 levels as part of its commitment to the Copenhagen Accord.

With respect to changes to the Department's **legislative responsibilities,** the *Environmental Enforcement Act* received Royal Assent in June 2009. The Act includes increased penalties in environmental statutes under the authority of the Minister of the Environment. The Department also made strides in its environmental enforcement services, through achievement of the 2009–2010 plans to hire, train and deploy additional enforcement officers, and to enhance related laboratory capacity and technical support.

Under the requirements of the new *Federal Sustainable Development Act,* which received Royal Assent in June 2008, public consultations were launched on a proposed new government-wide strategy to improve how the environment is considered in policy and program development. The strategy also proposes a new approach to monitoring and reporting using objective and rigorous data, including data from the Canadian Environmental Sustainability Indicators (CESI).

The year also saw continued implementation of the *Species at Risk Act* (SARA). In response to a public commitment, a suite of draft policies has been developed and communicated to stakeholders explaining how the federal government intends to use SARA to meet its obligations. In addition, as of March 31, 2010, Environment Canada had completed 41 recovery strategies, 2 action plans and 2 management plans.

The Department made progress on its **regulatory agenda**. Implementation of the Chemicals Management Program achieved its 2009–2010 objectives. Specifically, 259 existing substances were under risk assessment, which led to the issuance of 44 substance profiles, 63 draft screening assessments and 152 final screening assessments. Draft regulations to limit greenhouse gas emissions from new vehicles beginning with the 2011 model year were prepared for release on April 1, 2010. New regulations were announced to reduce emissions of volatile organic compounds (pollutants that contribute to the formation of ground-level ozone and particulate matter, two key smog components) from products such as paints, finishes, dyes, and varnishes. Proposed Wastewater Systems Effluent Regulations were published in the *Canada Gazette*, Part I, in March 2010. When in force, the Regulations will set a minimum national effluent quality standard reflecting secondary wastewater treatment, as agreed to in the Canadian Council of Ministers of the Environment (CCME) Canada-wide Strategy for the Management of Municipal Wastewater Effluent, which was endorsed in 2009 by all jurisdictions except Newfoundland and Labrador, Nunavut and Quebec.

As a **service provider** to Canadians, the Department continued to provide its weather and related services 24-hours a day, 7 days a week and successfully forecasted several severe weather events such as 41 tornadoes during the summer of 2009 and Hurricane Bill. There was effective coordination with emergency measures organizations and environmental emergency agencies during these events, although it was recognized local notification around sudden and severe weather situations could be improved. The Air Quality Health Index Program was expanded to 14 new sites across Canada and enhancements were made to the automated telephone answering devices (ATAD), the Weatheroffice website and Weatheradio systems to increase reach and ensure effective delivery of weather information in both official languages.

The **Vancouver 2010 Olympic and Paralympic Games** showcased some exciting advances in weather forecasting that contributed to the Games' success. Environment Canada spent four years monitoring and model building, so as to best ensure accurate predictions during the Games. The Department received international and national recognition of its meteorological research project at the Games, which used an array of measuring instruments, high-resolution forecast models and nowcasting (very short-term forecasts) techniques to provide forecasts of weather conditions, down to the scale of a single Olympic event.

Environment Canada worked through a wide variety of **partnerships** on priority issues. With respect to water, for example, Environment Canada worked collaboratively with its partners to clean up polluted and problem waters from coast to coast to coast, including the Great Lakes, Lake Simcoe, and Lake Winnipeg. Projects received funding under the Great Lakes Sustainability Fund, the Lake Simcoe Clean-Up Fund, and the Lake Winnipeg Basin Initiative to help clean up, protect and restore our lakes and rivers. The 2007 Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem, set to expire on March 31, 2010, was extended to March 31, 2011. This extension allows Canada and Ontario to continue their work to protect and restore the Great Lakes while

the governments of Canada and the United States negotiate amendments to the Great Lakes Water Quality Agreement. Also in partnership with the United States, Environment Canada began implementing the U.S.-Canada Clean Energy Dialogue (CED), including the first Report to Leaders in September 2009 that outlines progress made on the 20 projects identified in the CED Action Plan.

The conservation and protection of Canada's biodiversity was a focus for several initiatives in 2009–2010. For example, funds totalling $3.3 million[2] were allocated to 99 projects under the federal Aboriginal Funds for Species at Risk, with over 90 First Nations, Inuit and Métis organizations or community groups directly involved in the projects funded. Through the Habitat Stewardship Program for Species at Risk, $12.1 million was invested in various communities across Canada for the restoration of endangered and threatened species and other species at risk, and to help prevent other species from becoming a conservation concern. Also, during 2009–2010, the total value of properties donated through Environment Canada's Ecological Gifts Program was over $40 million, for a total of over $500 million since the beginning of the program.

Science and technology (S&T) is the foundation of Environment Canada's work and accounts for the majority of the Department's budget and staff. Over two-thirds of the Department's budget and more than half of its workforce is dedicated to science and technology. Environment Canada's S&T activities generate the knowledge and tools needed to develop and implement policy and regulations, deliver services to Canadians, and disseminate information on environmentally sound technologies. Significant progress was made in 2009–2010 to implement Environment Canada's Science Plan, with a supplement to the Department's technology role also added to the Plan during the year. In addition, the Department put in place two Web-based tools (Science Alert and the S&T Expert) to better transmit new research and share research expertise with both internal and external users of S&T.

Finally, on its management agenda, the Department redefined its Program Activity Architecture (PAA) for 2010–2011, to explain more clearly the Department's programs and performance to Canadians. Important progress was also made on priorities related to financial and people management. For instance, a single source for financial data was made available to all managers in the Department so that a snapshot of the financial situation can be obtained anytime, thus allowing greater accuracy, timeliness and consistency in financial reporting. On people management, the 2008 Public Service Employee Survey results were validated, analyzed, and supported the introduction of common commitments in all 2010–2011 Branch Head performance agreements to address issues raised in the survey. Overall the Department saw a net rating improvement in five categories under the Management Accountability Framework (seven improvements and two declines) in 2009–2010, during which the Department received at least an acceptable rating in 17 of the 19 Areas of Management

[2] Includes other federal departmental funding as well.

Lessons Learned during 2009–2010

The extent to which the Department met stated objectives across the full range of Program Activities included in its four Strategic Outcomes provides important opportunities for learning how to improve the Department's performance in the future. The lessons are:

Lesson #1: The importance of environmentally oriented partnerships:
Program results achieved in 2009–2010 suggest that the Department can do even more to energize the multi-initiative, multi-partner approaches to protecting Canada's fragile ecosystems, and monitoring and predicting Canada's weather patterns.

First, there is a strong data collection and monitoring leadership role that the Department can play in making improvements to its system of gathering and interpreting long-term trend data so that all biodiversity-related initiatives can be informed and guided by better information about the state of ecosystems.

Second, the experiences in 2009–2010 suggest that the Department can use its unique science capacity and broad based program footprint to nourish its partnerships through constant infusion and dissemination of best practices.

Third, it is clear from the Department's efforts on biodiversity, weather and environmental services that "outreach" to partners needs to remain a very high priority for years to come. Involvement of Canada's Inuit leaders and communities in the development of a new Canadian position on trade in polar bears is an excellent example of outreach and partnership making for better results. The effective region-wide severe weather notifications associated with Hurricane Bill in Atlantic Canada is another example of successful outreach to the Department's partners. In contrast, the challenges experienced in disseminating severe weather warnings past the regional level and down to local levels indicates there is still more outreach to be done by the Department towards establishing a truly effective and comprehensive severe weather warning network across Canada's regions and communities.

Lesson #2: The importance of continuous improvement:
Another lesson to be drawn from the Department's performance involves the concept and practice of continuous improvement. Over the course of 2009–2010, it became clear that more work is needed by the Department in terms of understanding the role that nutrients play in ecosystems. It was also clear that the Department's continued improvements in implementing the *Species at Risk Act* (SARA) in 2009–2010 were headed in the right direction. For instance, draft policies were developed and communicated to stakeholders to clarify roles and responsibilities in the ongoing implementation of SARA, and this will help improve coordinated action and enhance administrative efficiency in the implementation process. Activities in 2009–2010 also identified the need for continuing improvements in both managing weather monitoring systems and the actual performance of weather prediction systems.

Learning from experience was advanced in 2009–2010 as the Department acted upon the results of audits and evaluations, and improved the effectiveness and efficiency of departmental policies, programs and management.

Finally, the singular achievements of the Department in 2009–2010 with respect to the Vancouver 2010 Olympic and Paralympic Games is an excellent example of the Department positioning itself to learn from its successes, with the specific winter forecasting models developed for the Winter Olympics now available to inform the development of other weather forecasting models.

Lesson #3: The value of horizontal integration:

Another useful development in 2009–2010 was the effectiveness of horizontally oriented efforts to integrate data gathering and thereby reduce duplication of data gathering activities, simplify and align information collection more directly with departmental priorities and strengthen program reporting. Section II of this Report presents several examples where consolidation of data gathering proved useful.

As well, the Department made effective advances in horizontal coordination of environmental protection activities across a number of federal departments, important developments which helped bring a number of federal mandates to bear on environmental priorities in a way that made the total federal effort on environmental protection more than the sum of its parts.

In summary, these "lessons learned" point the Department not in the direction of the re-engineering of major programs, but, instead, in the direction of demonstrating the multiplier effect that a relatively small number of core practices can have on the Department's overall performance. The lessons learned by the Department in 2009–2010 clearly indicate that emphasizing and energizing partnerships, placing emphasis on continuous improvement, and increasing the use of horizontal integration practices can **enhance** the results generated by the Department's programs. Moreover, this can expand the scale and range of resources being focused on Canada's environment-related priorities as a result of multi-jurisdictional partnerships and increased integration of programs across a number of federal departments.

Performance Summary:

2009–2010 Financial Resources ($ millions)

2009–2010 Financial Resources* ($ millions)		
Planned Spending	**Total Authorities**	**Actual Spending**
992.5	1,173.7	1,095.1

Totals may differ between and within tables due to rounding of figures
* Excludes services received without charge and respendable revenues.

The Department's planned spending represents that amount approved by Parliament through Main Estimates and increased by other anticipated adjustments for the balance of the year. Throughout the year, new and renewed funding added a total of $181.2 million to Planned Spending, increasing the Total Authorities to $1,173.7 million. In addition to $52.3 million increased employee compensation funding, the main programs contributing to this increase were the Clean Air Regulatory Agenda ($25.2 million), the Mackenzie Gas Project ($9.5 million), Modernizing Federal Laboratories ($6.4 million) and a statutory payment to the Nature Conservancy of Canada ($29.3 million). The Actual Spending of $1,095.1 million (93 percent of Total Authorities) reflects the departmental expenditures as reported in the Public Accounts with a resulting surplus of $78.6 million. Much of this surplus was due to the decision to reprofile funds to future fiscal years for Sustainable Development Technology Canada (SDTC) ($12.5 million), National Vehicle Scrappage ($7.2 million) and the Great Lakes Sediment Remediation Program ($10.9 million).

2009–2010 Human Resources (Full-time Equivalents)

2009–2010 Human Resources (Full-time Equivalents)		
Planned	**Actual**	**Difference**
6,678	6,817	139

The human resources required to sustain an average level of employment over 12 months are based on a 37.5-hour work week. Environment Canada used 6,817 full-time equivalents (FTEs) in 2009–2010. This increase of 139 FTEs or 2 percent over the initial planned estimate of 6,678 FTEs reflects new FTEs associated with the $181.2 million new and renewed funding noted in the Financial Resources Table above. This FTE utilization represents an increase of 260 over that of 2008–2009 (6,557 FTEs).

Performance Summary by Strategic Outcome

The following tables present an overview of key achievements and progress towards program results during 2009–2010 and a summary of financial information for each Program Activity.[3] For further information on performance by Strategic Outcome, please refer to Section II.

For an overview of the program activities within each Strategic Outcome and their ratings please refer to pages 25 and 26 of this report.

($ millions)

Strategic Outcome 1: Canada's natural capital is restored, conserved, and enhanced

Overview of key achievements in 2009–2010:

- In 2009–2010, Environment Canada worked to ensure consistent application of laws to protect Canada's biodiversity. In the ongoing implementation of the *Species at Risk Act*, Environment Canada has developed and communicated a suite of policies that clarify administrative processes and inter-jurisdictional roles and responsibilities to enhance coordinated action. In addition, the Department developed a more streamlined approach to the development and posting of future species recovery planning documents. As of March 31 2010, Environment Canada completed 41 recovery strategies, 2 action plans and 2 management plans.
- Northwest Territories Protected Areas Strategy: The Edéhzhíe Working Group released its final recommendations report in November of 2009 (http://www.nwtpas.ca/area-edehzhie.asp), bringing this candidate National Wildlife Area one step closer to being formally designated a National Wildlife Area under the *Canada Wildlife Act*.
- Marine Protected Areas: Environment Canada completed a Policy Framework for Canada's Network of Marine Protected Areas in cooperation with Fisheries and Oceans Canada and with Parks Canada. The policy framework will set direction for the establishment of marine protected areas under the Health of the Ocean's (HOTO) initiative.
- Canadian Council on Ecological Areas (CCEA): Environment Canada led the further refinement of Conservation Areas Reporting and Tracking System (CARTS) including the identification of marine conservation areas and the move towards better online mapping and tracking tools.
- In 2009–2010, the Government invested $8 million to continue to implement the Great Lakes Action Plan, as well as $54 million and $15 million in the Great Lakes and the St. Lawrence, respectively, to clean up toxic sediment and pursue related science activities.
- The Department supported the sustainable use and management of ecosystems by advancing the implementation of an ecosystem approach with an emphasis on strengthening the ecosystem knowledge base and approaches to building integrated environmental monitoring and prediction tools

Program Activity	2008–2009 Actual Spending	2009–2010 Main Estimates	2009–2010 Planned Spending	2009–2010 Total Authorities	2009–2010 Actual Spending	Alignment with Government of Canada Outcomes
Biodiversiy and Wildlife Pogram *Details p. 35*	146.1	85.0	85.1	143.2	138.1	Clean and healthy environment

[3] The Strategic Outcome "Sustainable urban development and infrastructure renewal in The Toronto Waterfront area" was eliminated in 2009–2010 given the transfer of this function to Finance Canada. The 2008–2009 Actual Spending for that Strategic Outcome was $84.5M.

Water Program *Details p. 39*	81.5	94.3	94.3	99.2	87.4	
Ecosystems Initiatives Program *Details p. 42*	33.0	40.2	40.2	42.4	35.4	
Total (excluding Internal Services)	**260.6**	**219.5**	**219.6**	**284.8**	**260.9**	
Internal Services	84.9					
Total (including Internal Services)	**345.5***					

Note: Numbers exclude respendable revenues and services received without charge, and totals may differ between and within tables due to rounding of figures.

* The 2008–2009 Actual Spending included $84.9 million for Internal Services. With Internal Services removed[4], the total actual spending for 2008–2009 was $260.6 million. A year over year comparison shows that in 2009–2010, there was an increase of $0.3 million, or 0.1 percent.

[4] Internal Services are displayed separately from other program activities which is consistent with both the Program Activity Architecture and the 2009-2010 Report on Plans and Priorities. Please refer to page 5 for further information.

($ millions)

Strategic Outcome 2: Weather and environmental predictions and services reduce risks and contribute to the well-being of Canadians						
Overview of key achievements in 2009–2010: • Environment Canada continued to provide its weather and related services 24-hours a day, 7 days a week. The Vancouver 2010 Olympic and Paralympic Games were an opportunity to highlight Environment Canada's outstanding weather prediction and environment services on the world stage. • In 2009–2010, the Department successfully forecasted major events such as Hurricane Bill and the tornado outbreak in southern Ontario. There was strong coordination with emergency measures organizations and environmental emergency agencies during major meteorological events. • The Air Quality Health Index Program was expanded to 14 new sites across Canada, and various enhancements were made to the automated telephone answering devices (ATAD), the Weatheroffice web site and Weatheradio systems to increase reach and ensure effective delivery of weather information to Canadians in both official languages. • In response to key risks identified with weather services, strategies for moving forward are being developed as well as options for where key investments should be made as resources permit to reduce vulnerabilities and strengthen critical infrastructure.						
Program Activity	**2008–2009 Actual Spending**	**2009–2010 Main Estimates**	**2009–2010 Planned Spending**	**2009–2010 Total Authorities**	**2009–2010 Actual Spending**	**Alignment with Government of Canada Outcomes**
Environmental Science and Monitoring Program *Details p.47*	98.2	90.5	90.4	108.2	105.8	Clean and healthy environment
Weather and Environmental Prediction Program *Details p. 49*	83.2	86.4	86.4	93.0	90.9	
Total (excluding Internal Services)	**181.4**	**176.9**	**176.8**	**201.2**	**196.7**	
Internal Services	142.5					
Total (including Internal Services)	**323.9***					

Note: Numbers exclude respendable revenues and services received without charge, and totals may differ between and within tables due to rounding of figures.

* The 2008–2009 Actual Spending included $142.5 million for Internal Services. With Internal Services removed[5] from 2008–2009, the total actual spending was $181.4 million. In 2009–2010, there was an increase of $15.3 million, or 8.4 percent. This increase is mainly attributable to employee compensation cost ($8.7 million), capital spending for life-cycle management ($3.2 million) and incremental spending to supplement Adaptation program initiatives in support of Canada's Clean Air Regulatory Agenda ($1.1 million).

[5] Internal Services are displayed separately from other program activities which is consistent with both the Program Activity Architecture and the 2009-2010 Report on Plans and Priorities. Please refer to page 5 for further information.

($ millions)

Strategic Outcome 3: Canadians and their environment are protected from the effects of pollution and waste

Overview of key achievements in 2009–2010:

- The Government announced a $400 million investment in fiscal year 2010–2011 as Canada's first step in delivering its fair share of the Copenhagen Accord's commitment by advanced economies to provide financing assistance to developing countries to address climate change. The Accord reflects key Canadian negotiating principles and objectives on a wide range of issues including mitigation, adaptation, finance and technology. In January 2010, Canada submitted an economy-wide emissions target for 2020 of 17 percent below 2005 levels as part of its commitment to the Copenhagen Accord.
- The Department worked on the development of greenhouse gas emissions regulations for the transportation sector, specifically for new cars and light trucks for the 2011 and later model years. Progress also continued on approaches to reduce greenhouse gas emissions from industrial sectors in the context of a potential North American cap-and-trade system.
- A proposal for a Comprehensive Air Management System (CAMS) was developed through joint work with the provinces, industry and non-governmental organizations to improve air quality management in Canada.
- Proposed regulations were published in the *Canada Gazette*, Part I, to address wastewater effluent on a national basis.
- In partnership with Health Canada, Environment Canada continued to implement the Chemicals Management Plan. The Plan is on track and meeting all of its commitments within established timelines.[6]

Program Activity	2008–2009 Actual Spending	2009–2010 Main Estimates	2009–2010 Planned Spending	2009–2010 Total Authorities	2009–2010 Actual Spending	Alignment with Government of Canada Outcomes
Chemicals Management Program *Details p. 55*	74.4	127.2	127.2	132.0	120.1	Clean and healthy environment
Legislation and Information Program *Details p. 60*	75.0	47.9	47.9	53.4	50.1	
Clean Air Program *Details p. 62*	77.6	138.1	138.1	138.0	109.5	
Total (excluding Internal Services)	**227.0**	**313.2**	**313.2**	**323.4**	**279.7**	
Internal Services	139.4					
Total (including Internal Services)	**366.4***					

Note: Numbers exclude respendable revenues and services received without charge, and totals may differ between and within tables due to rounding of figures.

[6] For further information, please see http://www.chemicalsubstanceschimiques.gc.ca/plan/index_e.html.

* The 2008–2009 Actual Spending included $139.4 million for Internal Services. With Internal Services removed[7], the total spending for 2008–2009 was $227 million. A year over year comparison shows that in 2009–2010, there was an increase of $52.7 million, or 23.2 percent. This increase is primarily attributable to the realignment of the Enforcement program ($41.6 million) under the Chemicals Management Program Activity and increased spending for the following programs: National Vehicle Scrappage ($21.2 million), Clean Air Regulatory Agenda ($18.9 million) and Chemicals Management Plan ($2.8 million). These increases were offset by a reduction in payment to the Canada Foundation for Sustainable Development Technology ($31.5 million).

[7] Internal Services are displayed separately from other program activities which is consistent with both the Program Activity Architecture and the 2009-2010 Report on Plans and Priorities. Please refer to page 5 for further information.

($ millions)

Strategic Outcome 4: Canadians benefit from the responsible development of the Mackenzie gas resources
Overview of key achievements in 2009–2010: In 2009–2010, the Mackenzie Gas Project Office[8] (MGPO) played a central role in coordinating federal government activities in support of the Mackenzie Gas Project (MGP). Key achievements during the year included the following: • The development of a project management plan that provided detail regarding the steps that the Government of Canada would take in order to respond to the Joint Review Panel (JRP) report that assessed the potential impact of the project upon the environment and the lives of the people living along the proposed pipeline route. The JRP report was released on December 30, 2009. • The development of a consultation plan amongst federal departments that would enable the Government to undertake consultations with Aboriginal communities, as required, in order to complete the Government's response to the JRP report. • The finalization of a regulatory implementation plan that would be used by federal, territorial and northern regulators with responsibility for issuing nearly 7,000 permits and authorizations associated with the MGP.

Program Activity	2008–2009 Actual Spending	2009–2010 Main Estimates	2009–2010 Planned Spending	2009–2010 Total Authorities	2009–2010 Actual Spending	Alignment with Government of Canada Outcomes
Mackenzie Gas Project *Details p. 66*				9.7	6.5	Strong economic growth
Total	**0.0**	**0.0**	**0.0**	**9.7**	**6.5**	

Note: Numbers exclude respendable revenues and services received without charge, and totals may differ between and within tables due to rounding of figures.

* For 2009–2010, $37.6 million was allocated government-wide to the Mackenzie Gas Project, of which $9.7 million was assumed by Environment Canada

[8] For further details on the transfer of the Mackenzie Gas Project Office to Environment Canada, please see page 6

Results Ratings - Overview

Building on improvements started last fiscal year, Environment Canada continues to seek increased clarity in performance reporting. In keeping with the reporting requirements introduced by the Treasury Board of Canada Secretariat (TBS), this year's Departmental Performance Report (DPR) includes a range of performance indicators, and provides readily available supplementary information through Web links on a host of departmental activities.

As with previous years, the Department continues to use visual ratings to illustrate progress made for each Expected Result stated in the 2009–2010 Report on Plans and Priorities (RPP). The ratings are complemented through text that, as far as possible, provides a balanced, complete, accurate and representative assessment of program performance, and that fairly demonstrates the contribution of Environment Canada programs to progress against objectives that may be shared with other organizations and jurisdictions.

Performance ratings are based on self-assessments performed by Environment Canada's management, supported by various levels of data availability, with some of the data being qualitative in nature. We will continue to move forward towards a more quantitatively based assessment of performance where appropriate.

In 2009–2010, the Department continued to improve the Performance Measurement Framework (PMF), supporting the transition to a stronger performance measurement capability through identification of measureable indicators at both the Strategic Outcome and Program Activity levels. These indicators, which are reflected in the 2009–2010 RPP, are used to contribute to a stronger performance assessment process. Further enhancement of the PMF will occur in 2010–2011, thus supporting greater use of objective, evidence-based performance reporting for Parliament and the public on achieved results and outcomes.

This DPR provides performance ratings, as evidenced by the outcome indicator and target or achievement of planned activities and outputs, using the same rating scale, in two different areas: progress on specific departmental priorities (see page 21); and progress towards program expected results (see Section II beginning on page 34).

The table on the next page provides definitions of the performance ratings for this report, which are consistent with TBS guidelines.

Performance Rating	Performance Rating Definition
✚	**Exceeded:** More than 100 percent of the expected level of performance (as evidenced by the indicator and target or planned activities and expected outputs) for the expected result or priority identified in the corresponding RPP was achieved during the fiscal year.
■	**Met All:** 100 percent of the expected level of performance (as evidenced by the indicator and target or planned activities and expected outputs) for the expected result or priority identified in the corresponding RPP was achieved during the fiscal year.
▢	**Mostly Met:** 80 to 99 percent of the expected level of performance (as evidenced by the indicator and target or planned activities and expected outputs) for the expected result or priority identified in the corresponding RPP was achieved during the fiscal year.
▢	**Somewhat Met:** 60 to 79 percent of the expected level of performance (as evidenced by the indicator and target or planned activities and outputs) for the expected result or priority identified in the corresponding RPP was achieved during the fiscal year.
☒	**Not Met:** Less than 60 percent of the expected level of performance (as evidenced by the indicator and target or planned activities and outputs) for the expected result or priority identified in the corresponding RPP was achieved during the fiscal year.

Contribution of Department's Priorities to Strategic Outcomes

In its 2009–2010 Report on Plans and Priorities, Environment Canada identified six program priorities and one management priority on which it would focus during 2009–2010. These priorities fully support ongoing progress towards program results in support of the Department's Strategic Outcomes. [9]

That said, the Department faced challenges in contributing to the operational and management priorities. These are described in the Lessons Learned Section (see page 10 and 11)

The following table identifies the 2009–2010 priorities, provides a rating of performance for 2009–2010, and provides highlights of a few achievements and progress against these priorities, and the plans for meeting these priorities, as cited in the 2009–2010 RPP.

Operational Priorities for 2009–2010	Type	Performance Status	Linkages to Strategic Outcome(s)
1- Reducing greenhouse gas emissions domestically and through international agreements.	**Ongoing**	☐ **Mostly Met**	**Strategic Outcome 3**

- Progress was made in advancing approaches to reduce greenhouse gas emissions from industrial sectors in the context of a potential North American cap-and-trade system, including a draft set of rules and guidance for Canada's Offset System published in June 2009. New regulations were announced and are being developed for the transportation and electricity generation sectors.
- Negotiations and climate change discussions over the course of 2009 led to the achievement of progress in the form of the Copenhagen Accord. The Accord, a political agreement by over 120 world leaders, represents a significant step towards the development of a more fair, effective and comprehensive post-2012 international climate regime. The Accord included the following achievements:
    - It includes significant mitigation commitments by all major economies.
    - It commits developing countries to undertake enhanced and more frequent reporting of greenhouse gas emissions and provides for the establishment of a process of international review of their actions.
    - It commits developed countries to provide strengthened fast-start financing over the short term (to 2012) to help implement adaptation action in developing countries, and recognizes the importance of mobilizing both public and private sources over the long-term.
    - It emphasizes the importance of taking urgent action on adaptation, with a particular focus on the poorest and most vulnerable developing countries.
    - It sets the stage for the establishment of key mechanisms in support of reducing emissions from deforestation and technology transfer.
- The Government of Canada revised its national target to reduce greenhouse gas emissions to 17 percent below 2005 levels by 2020 to align with the U.S. target, and has inscribed this target in the Copenhagen Accord.

[9] Please refer to Environment Canada's 2009–2010 RPP: Section I - Contribution of Department's Priorities to Strategic Outcomes

• Key regulatory steps were taken in the transportation sector to reduce greenhouse emissions. Beginning in 2011, Canada and the U.S. will have common standards for limiting tail pipe emissions from new cars and light trucks.			
2- Protecting Canadians from air pollution and toxic substances.	**Ongoing**	☐ **Mostly Met**	**Strategic Outcome 3**
• Implementation of the Chemicals Management Plan met its deliverables within the established timelines. In 2009–2010, 259 existing substances were under risk assessment, which led to the issuance of 44 substance profiles, 63 draft screening assessments and 152 final screening assessments. • In 2009–2010, a proposal for a Comprehensive Air Management System (CAMS) was developed through joint work with the provinces, industry and non-governmental organizations to improve air quality management in Canada. • The Department published new regulations designed to reduce volatile organic compounds (VOC) emissions from automotive refinishing products and VOC concentration limits in the architectural coatings sector.			
3- Strengthening the meteorological and environmental services to Canadians.	**Ongoing**	☐ **Mostly Met**	**Strategic Outcome 2**
• In 2008, the Commissioner of the Environment and Sustainable Development (CESD) conducted an audit on the way Environment Canada manages its severe weather-warning program, identifying a number of issues with the Department's ability to deliver high-quality warnings, forecasts and related products and services to Canadians in a sustainable manner. Examples of improvements to the warning and forecasting programs taken in 2009–2010 that help address these issues are the reinvestment and advancement in forecasting through the introduction of the Ninjo forecaster workstation, the continued progress with Public Safety Canada in the development of a national public alerting system (NPAS) for Canada, and the development of a long-term strategy to improve the effectiveness of Environment Canada's warning production and delivery system. • Environment Canada provided weather prediction services essential to the success of the Vancouver 2010 Olympic and Paralympic Games and had considerable success in forecasting major severe weather events; both Nova Scotia and Newfoundland acknowledged Environment Canada's performance in the preparations for Hurricane Bill. • With an eye on the future to address key risks identified with weather services, strategies for moving forward are being developed as well as options for where key investments should be made, as resources permit. These strategies are intended to better position the Department to move forward with the resourcing of priorities and the continued strengthening of these services in the years immediately ahead.			

4- Taking action to improve biodiversity and water quality.	Ongoing	☐ Mostly Met	Strategic Outcome 1
• The year under review saw continued implementation of the *Species at Risk Act* (SARA), and the start of the five-year review of SARA. This included development and communication of a draft suite of policies explaining the federal government's understanding of, and obligations under SARA. • The conservation and protection of Canada's biodiversity was advanced through partnerships such as funding under the federal Aboriginal Funds for Species at Risk and the Habitat Stewardship Program for Species at Risk and donations through the Ecological Gifts Program. • The Protected Areas Program has expanded support for habitat conservation in the North with six National Wildlife Areas identified in the Northwest Territories and three established in Nunavut. Consideration is being given to Sable Island off the coast of Nova Scotia to be changed from a National Wildlife Area to a National Park. • The Department made significant contributions to the United Nations Environment Programmes (UNEP) Global Environmental Monitoring System (GEMS) to allow the program to expand to add data quality management activities, water assessments and capacity building. GEMS is the only global water quality monitoring system and its activities include assessments of freshwater lakes, reservoirs, rivers and ground waters, maintenance of a global water quality database and management of an international network of participating countries, to support global environmental assessments, water resource management and economic and environmental decision making. • Work continued with the United States to amend the Great Lakes Water Quality Agreement, and to modernize the Agreement to address new challenges in water quality while strengthening efforts to reduce toxic pollution in the Great Lakes. Environment Canada provided support to Foreign Affairs and International Trade Canada in drafting legislation to strengthen prohibitions on the bulk removal of Canada's water outside the country. • In 2009–2010, the Government invested $8 million to continue to implement the Action Plan for the Great Lakes, as well as $54 million and $15 million in the Great Lakes and the St. Lawrence, respectively to clean up toxic sediment and pursue related science activities. Environment Canada met second year commitments for the Action Plan for Clean Water through the delivery of the Lake Simcoe Clean-up Fund and Lake Winnipeg Basin Stewardship Fund, and by providing leadership, science and expertise to the Lake Winnipeg Basin Initiative.			
5- Enhancing the enforcement program to improve environmental outcomes.	**Ongoing**	■ **Met All**	**Strategic Outcomes 1 and 3**
• The new *Environmental Enforcement Act*, which received Royal Assent in June 2009, strengthened the enforcement of wildlife laws through increased fines and new enforcement tools. A strategic enforcement framework was developed and implemented for planning and decision-making to strengthen the identification of priorities that focus on the most serious wildlife risks and threats. • The Department successfully completed plans to expand the Enforcement Program by 50 percent through the hiring, training, and deployment of additional enforcement officers. • Operational and management capacity, and laboratory and technical support, were increased.			
6- Continuing to take leadership on horizontal environmental initiatives.	**Ongoing**	☐ **Mostly Met**	**Strategic Outcomes 1, 2, and 3**
• The Air Quality Health Index Program has been accepted by nearly all provincial partners, local partners, and the media. It has become one of the most successful programs under the Adaptation Theme in the Government of Canada Clean Air Agenda. • Partners were engaged on the Contaminated Sites Program to deliver key commitments, including			

Economic Action Plan commitments, and good progress was made on planning for program renewal.

- Under the requirements of the new *Federal Sustainable Development Act*, Environment Canada led the process to prepare and publish the Federal Sustainable Development Strategy consultation paper.
- The Government of Canada committed $500 million for Sustainable Development Technology Canada's NextGen Fund™ to support the establishment of commercial scale demonstration facilities for the production of next-generation renewal fuels. The funding is equally divided between Natural Resources Canada and Environment Canada.

Management Priorities for 2009–2010	Type	Performance Status	Linkages to Strategic Outcome(s)
7- Strengthening the support to Program Activities through enhancement of key enabling functions.	**Ongoing**	☐ **Mostly Met**	**Strategic Outcomes 1, 2, 3 and 4**

- Progress has been made on integrated planning by improving linkages across financial, human resources, information technology/management, and communications planning components. Specifically, during the operational planning process, financial resource requirements (salary, Operation and Maintenance, Grants and Contributions and Capital) and non-financial planning components (HR, IM/IT, Communications) were solicited from line managers through a single department-wide call letter and common templates. This effort was assisted by the participation of enabler portfolio managers (e.g., HR, Communications, IM/IT) who worked with line managers in defining these resource requirements.
- The departmental financial position is now presented through a standard single source for financial data in electronic format that is generally updated weekly and is available to all managers across the Department. The single source of financial data for internal departmental reporting ensures consistency and accuracy.
- Key departmental priorities were supported through the development of policy advice for consideration by senior management; interdepartmental policy processes were successfully coordinated and supported and core policy activities—including the fulfillment of legislated reporting requirements—were effectively managed.

Note: Performance status ratings definitions are provided on page 20.

Performance by Program Activity—Overview

The following table presents an overview of the performance status ratings for each of the expected results identified in the Environment Canada 2009–2010 RPP. The performance status ratings provide an assessment of progress achieved during the year against the indicators and targets or activities and outputs for results as stated in the RPP. Details regarding the progress achieved during 2009–2010 are provided in Section II of this DPR.

Program Activities	Expected Results as per 2009–2010 Report on Plans and Priorities	Performance Status, 2009–2010
Strategic Outcome 1: Canada's natural capital is restored, conserved and enhanced		
Biodiversity and Wildlife Program	Populations of wildlife, in particular migratory birds and species at risk, are maintained at healthy levels	☐ Mostly Met *Details p.35*
	Habitats for healthy populations of wildlife, in particular migratory birds and species at risk, are protected and conserved	☐ Somewhat Met *Details p.36*
Water Program	Risks to aquatic ecosystems resulting from human activity are reduced	☐ Somewhat Met *Details p.39*
Ecosystems Initiatives Program	Beneficial uses and environmental quality in priority ecosystems are maintained or restored	☐ Mostly Met *Details p.42*
	Potential significant adverse environmental effects of projects/ plans/ programs/ policies subject to federal environmental assessment legislation and Cabinet directives are avoided or mitigated	✚ Exceeded *Details p.42*
Strategic Outcome 2: Weather and environmental predictions and services reduce risks and contribute to the well-being of Canadians		
Environmental Science and Monitoring Program	Environment Canada and partners receive high-quality observations that allow them to identify, analyze and predict weather, air water and/or climate conditions	☐ Mostly Met *Details p.47*
	Environment Canada and partners receive high-quality weather and environmental prediction information (or models) that allow them to identify, analyze and predict weather, air, water and/or climate conditions	☐ Mostly Met *Details p.47*
Weather and Environmental Prediction Program	Canadians use weather forecasts for decision making	☐ Mostly Met *Details p.49*
	Weather and climate-sensitive industries, governments and institutions are aware of and benefit from Environment Canada's weather, climate, water and other services in their economic decision making and planning	■ Met All *Details p.50*

Strategic Outcome 3: Canadians and their environment are protected from the effects of pollution and waste		
Chemicals Management Program	Risks to Canadians and impacts on their environment posed by toxic and other substances of concern are reduced	□ Mostly Met *Details p.55*
Legislation and Information Program	Facilities releasing pollutants to the environment comply with public reporting requirements	□ Mostly Met *Details p.60*
	Regulations and orders made by Environment Canada under the *Canadian Environmental Protection Act, 1999* (CEPA 1999) and under the *Fisheries Act* (FA) comply with the Cabinet Directive on Streamlining Regulation, and with statutory and other policy requirements	■ Met All *Details p.60*
Clean Air Program	Risks to Canadians, their health and their environment from air pollutants and greenhouse gas emissions are reduced	□ Mostly Met *Details p.62*
Strategic Outcome 4: Canadians benefit from the responsible development of the Mackenzie gas resources		
Mackenzie Gas Project	Not applicable – please see p.66 for more details	N/A

Note: Performance status ratings definitions are provided on page 20.

Risk Analysis

In outlining the key risks that affected Environment Canada's plans, priorities, performance, and decision-making process, it is important to consider the broader context in which the Department operated in 2009–2010. While economic policies and priorities remained at the forefront of the government agenda, preserving Canada's environment remained a high priority for the government. Budget 2010 included new measures totalling more than $190 million to support a cleaner and more sustainable environment.

During 2009–2010, renewed interest and heightened expectations for progress on tackling climate change and other environmental issues became apparent. Anticipation of an international agreement for the post-2012 period places considerable pressure on the Department as it supports the Government in negotiating with international partners on climate change and in developing a broad range of regulations aimed at reducing greenhouse gas emissions to limit the potentially negative consequences of excessive global warming. Developing solutions that serve the mutual interests of Canada and its partners from both an economic and environmental perspective was a particular challenge. Canada typically seeks to align its policies with those of its international partners in order to facilitate trade and minimize potentially negative impacts to Canada's international standing and to Canadian business that would result from differing approaches, standards, targets and implementation timelines.

Environment Canada faced the challenge of managing relationships effectively with interested parties and stakeholders, both domestic and international. These relationships, embodying varying degrees of dependency for Environment Canada, are often with those holding differing views in terms of policy or the pace at which progress should be attained on environmental issues. If business relationships with partners are not well managed, or if there is a failure on the part of partners, negative impacts on program or service delivery could result. The large number of partners with whom Environment Canada deals, coupled with the speed and sophistication with which they communicate their positions, necessitated a clear, consistent and timely communication effort on the part of the Department. Mechanisms to support this effort included joint working groups, such as that established by the Department with its U.S. counterparts to deliver on the Clean Energy Dialogue's 20 commitments.

Operationally, the risk for Environment Canada is linked to its critical interdependencies with various partners, and the renewal of agreements. To collaborate effectively with domestic, continental and international partners, the Department has taken a proactive approach to enhancing relationship management. For instance, partnership agreements are established well in advance with other government departments (OGDs). For example, in summer 2009, a new long-term agreement was concluded between Environment Canada and NAV CANADA for the provision of aviation weather services.

Internally, some key risks related to human resource, financial and information management as well as business continuity emerged in 2009–2010 that could affect the Department's capacity to meet its priorities in subsequent years. For example, effective

resource management can be expected to be challenged by the need for fiscal restraint, as a result of the economic downturn. Current mitigation activities involve enhancing departmental integrated planning, streamlining resource allocation processes and increasing performance measurement capacity. In the context of managing risks related to resource management and information for decision-making, the Department continued to make progress towards provision of improved tools and processes through the Corporate Accountability and Administrative Renewal (CAAR) initiative. With this initiative, the Department is seeking to streamline and standardize its system of internal controls, improve financial information through the implementation of tools such as Oracle Hyperion and Asset Lifecycle Management, and increase the efficiency of business processes.

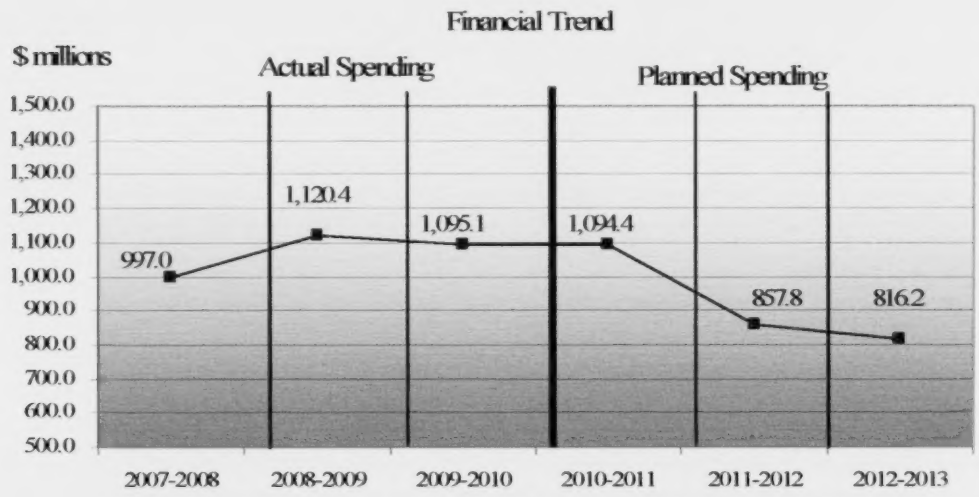
During the period under review, government management priorities continued to revolve around the Public Service Renewal initiative directed by the Clerk of the Privy Council. To this end, the 2009–2010 Clerk's Public Service Renewal Action Plan committed all departments to demonstrate progress on integrated human resource and business planning, recruitment, employee development and enabling infrastructure.
In large part, the Clerk's call for action was based on the recognition that a large number of employees are expected to retire in the next five years. In the Department's case, this will be an enormous challenge, given that its workforce, located in 100 communities across Canada, has expertise in a broad range of fields including biology, environmental sciences and assessment, meteorology, chemistry, engineering, hydrology, business, commerce, communications, economics, law enforcement, finance, informatics, law, library science, policy, social sciences and toxicology. The Department, therefore, faces the challenge of maintaining the knowledge and expertise to deliver on its mandate and achieve its strategic outcomes. To mitigate this risk, and as part of Environment Canada's response to the objectives embedded in the Clerk's 2009–2010 Public Service Renewal Action Plan, the Department developed a talent management framework to support the meeting of departmental priorities for 2009–2010 and beyond. The framework consists of four elements: more effective and efficient recruitment and staffing; improving representativeness; retaining and enhancing talent through learning and development; and retaining and strengthening capacity through succession planning.

Providing timely policy analysis and information remains a key component of the Department's business. Access to timely, consistent and accurate information is crucial for the proper functioning and governance of an organization. The sufficiency, availability and correct flow of management information impact the Department's ability to make informed decisions, adapt to change, respond to emergencies and ensure compliance with regulations. To improve data quality and availability, the Department is implementing an integrated information management (IM) plan by establishing key IM services and products, promoting policies and best practices for the management of information, and implementing new technologies to support information management. The Department continues to take steps to achieve compliance with the Government's Management of Information Technology Security (MITS) requirements and has made progress on its Business Continuity Planning program.

In summary, in the face of identified risks, the Department has implemented strategies to foster strong relationships with partners, better manage resources, address human resource needs, and enhance information management. The Department will continue to advance risk management practices by embedding risk management into departmental planning, and by better linking risk and performance management.

Expenditure Profile

The following chart depicts the Department's spending trend over a six year period (three-year Actual Spending reported in Public Accounts and three year Planned Spending as per the 2010–2011 Report on Plans and Priorities).



Excludes services received without charge of $94.1 million in 2009–2010. For further information, please see Financial Statements

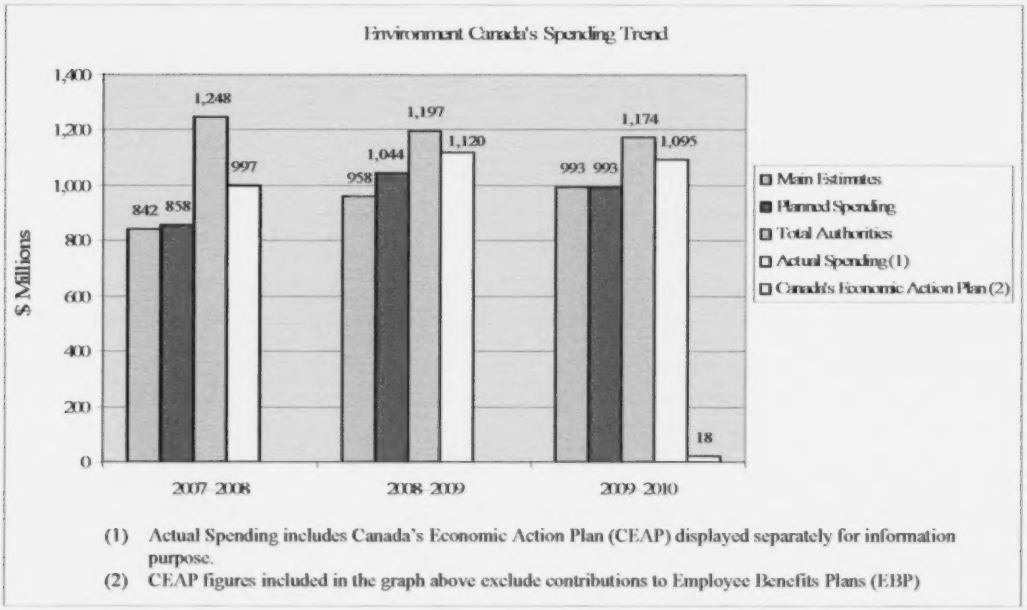
As seen in the chart above, Environment Canada's actual spending as per Public Accounts for 2009–2010 was $1.095 billion, a year-over-year decrease of $25.3 million or 2 percent from 2008–2009 spending. This slight net decrease is mainly due to reduced payments to foundations such as Nature Conservancy Canada and Sustainable Development and Technology Canada (SDTC). These decreases were offset by increased spending to implement the National Vehicle Scrappage Program and freshwater initiatives, as well as incremental spending related to Canada's Economic Action Plan such as the Modernizing Federal Laboratories Initiatives.

The increase in actual spending between 2007–2008 and 2008–2009 ($123.4 million) is primarily attributed to temporary funding supporting the regulatory work of the Chemicals Management Plan, the Clean Air Agenda, the implementation of the National Vehicles Scrappage Program and payment to the SDTC foundation for delivery of the NextGen Biofuels Fund™. In 2008–2009, the responsibility for the Toronto Waterfront Revitalization Initiative and Harbourfront Corporation was transferred to the Department, which also contributed to the increase in spending.

The decreased planned spending from 2010–2011 to 2012–2013 is the result of sunsetting and reduced funding for initiatives including the Chemicals Management Plan, Clear Air Agenda and Federal Contaminated Sites Action Plan. Sunsetting programs are subject to Government decisions to extend or enhance funding, The outcomes of these decisions

will, therefore, be reflected in both the Department's future budget exercises and Reports on Plans and Priorities.

The spending trend chart illustrates the Department's Main Estimates, Planned Spending, Total Authorities and Actual Spending for the last three years.



(1) Actual Spending includes Canada's Economic Action Plan (CEAP) displayed separately for information purpose.
(2) CEAP figures included in the graph above exclude contributions to Employee Benefits Plans (EBP)

Canada's Economic Action Plan (CEAP) Initiatives

Budget 2009 provided CEAP funding to Environment Canada for the following five initiatives:

- **Modernizing Federal Laboratories:** Funding was provided to address deferred maintenance at six Environment Canada laboratories over two years.
- **Accelerating the Federal Contaminated Sites Action Plan:** Funding was provided to accelerate assessment and remediation activities on federal contaminated sites under the Federal Contaminated Sites Action Plan (FCSAP).
- **Canada's Environmental Sustainability Indicators (CESI) Initiative:** Funding was provided to support the production of the indicators for clean air, clean water and greenhouse gases, to improve the CESI website and annual report, and to implement an engagement strategy to increase awareness of CESI products.
- **Promoting Energy Development in Canada's North:** Funding was provided to support the coordination and reporting on federal government activities required for the Joint Review Panel's environmental assessment and the Government's response to the report after its release in December 2009.
- **Arctic Research Infrastructure:** Funding was provided to support the development and expansion of Arctic research field camp facilities at seven sites in Nunavut and the Northwest Territories.

As seen in the chart above, CEAP funding had little impact on the overall departmental spending trend in 2009–2010.

Voted and Statutory Items

This table shows the voted items Parliament approved through the Main Estimates with its supply bills. The statutory items are included for information purposes.

($ millions)

Vote No. or Statutory Item (S)	Truncated Vote or Statutory Wording	2007–2008	2008–2009	2009–2010	
		Actual	Actual	Main Estimates	Actual
1	**Operating expenditures**	**700.5**	**763.7**	**736.3**	**818.6**
5	**Capital expenditures**	**35.7**	**45.0**	**44.5**	**47.3**
10	**Grants and contributions**	**106.9**	**164.5**	**129.8**	**101.5**
(S)	**Minister of the Environment: salary and motor car allowance**	**0.1**	**0.1**	**0.1**	**0.1**
(S)	**Contributions to employee benefit plans**	**81.1**	**81.2**	**81.9**	**98.0**
(S)	**Spending of proceeds from disposal of surplus Crown assets**	**1.0**	**0.8**	**0.0**	**0.5**
(S)	**Nature Conservancy of Canada**	**70.2**	**46.1**	**0.0**	**29.3**
(S)	**Grant to the Canada Foundation for Sustainable Development Technology**	**1.6**	**19.0**	**0.0**	**0.0**
	Subtotal - Actual Spending	**997.0**	**1,120.4**	**992.6**	**1,095.1**

Notes:
- Excludes services received without charge and respendable revenues.
- Totals may differ between and within tables due to rounding of figures.

The expenditure of $1,095.1 million in 2009–2010 represents a year-over-year net decrease of $25.3 million, or 2 percent. This decrease is mainly attributable to reduced grant payments to non-government organizations such as the Nature Conservancy of Canada and the Canada Foundation for Sustainable Development Technology.

Section II: Analysis of Program Activities by Strategic Outcome

Strategic Outcome 1: Canada's natural capital is restored, conserved, and enhanced

Description: Natural capital is the extension of the economic concept of capital to environmental goods and services essential for human survival and economic activity. Environment Canada works to conserve, restore and enhance Canada's natural capital by developing and implementing innovative strategies, programs and partnerships that contribute to securing Canada's wildlife, ecosystems, freshwater and wetland resources for present and future generations.

Performance Analysis:

Performance Indicators	Targets	2009–2010 Performance Summary
Proportion of migratory bird species whose population varies within acceptable bounds of the population goals.	Baseline data will be reported in 2010. A target level and date will be set once these baseline data are available.	Detailed population assessments for about 100 species of landbirds will be completed and posted on Environment Canada's website in 2010. Remaining landbird population assessments are to be completed in 2011 with other species to follow in 2012. Population targets are being developed within Bird Conservation Region plans, and an overall assessment of the state of birds in Canada is to be completed by end of 2011. Also, note that this indicator will track progress towards Environment Canada's Migratory Birds sub-activity in 2010–2011 and a new indicator[10] will replace it at the Strategic Outcome level.

According to Canada's 4th National Report to the United Nations Convention on Biological Diversity, progress in Canada toward the 2010 Convention on Biological Diversity target of *significantly reducing the rate of biodiversity loss* is mixed, with significant progress in some areas, and limited progress in others.[11] For example, through the efforts of multiple jurisdictions, there have been significant additions to Canada's networks of protected areas with approximately 9.4 percent of Canada's terrestrial area[12] currently protected as of mid-2009. In other areas, however, there is also evidence that degradation, fragmentation, and shifts in the structure and composition of many ecosystems are taking place owing to a number of pressures.[13]

Environment Canada's contribution to this Strategic Outcome was organized into three Program Activities:

- Biodiversity and Wildlife Program
- Water Program

[10] Every five years, the Department will track and report on the percentage of Canadian ecosystems where ecosystem health has been assessed as good.
[11] Canada's *4th National Report to the United Nations Convention on Biological Diversity*, p. 122.
[12] Terrestrial area refers only to land area and excludes marine and freshwater protected areas.
[13] Canada's *4th National Report to the United Nations Convention on Biological Diversity*, p. 122.

- Ecosystems Initiatives Program

Program Activity: Biodiversity and Wildlife Program					
2009–2010 Financial Resources ($ millions)			2009–2010 Human Resources (full-time equivalents)		
Planned Spending	**Total Authorities**	**Actual Spending**	**Planned**	**Actual**	**Difference**
85.1	143.2	138.1	341	572	231
Expected Results	**2009–2010 Performance Status rating**	**Performance Indicators**	**Targets**	**2009–2010 Performance Summary**	
Populations of wildlife, in particular migratory birds and species at risk, maintained at healthy levels	☐ Mostly Met	Percentage of "at risk" species whose status has either improved or has stayed the same upon reassessment	100% by 2015	88% of SARA Schedule 1 species that have been reassessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) since they were first listed was found either to be at the same conservation status or to have improved in status. [14]	
		Percentage of the 25 Bird Conservation Region provincial areas which have up-to-date all-bird Conservation Plans	100% by 2010	65% of the work on Bird Conservation Region Plans, incorporating population targets for priority species has been completed for 25 regions across Canada. All plans will be completed by September 2010.	

[14] Of the 107 species that have been reassessed by COSEWIC since they were first added to Schedule 1, COSEWIC has reassessed 9 species as being at a lower risk category (4 downlisted, 5 eligible for downlisting), 13 species were reassessed at a higher risk category (10 have been uplisted, another 3 are eligible for uplisting); 84 species were reassessed at the same level, and 1 species was determined to be no longer at risk.

Habitats for healthy populations of wildlife, in particular migratory birds and species at risk, are protected and conserved	☐ Somewhat Met	Land secured by Environment Canada and partners, as a percentage of the total amount needed to achieve population goals for all migratory bird Habitat Joint Ventures	100% by 2010[15]	As of March 31st, 2010, Environment Canada, working with its partners, secured 60,246 hectares[16] of wetlands and associated upland habitats for migratory birds and species at risk through the North American Waterfowl Management Plan (NAWMP). In total, 2,376,067 hectares have now been secured representing 69.1% of the goal of 3.44 million hectares.

The Program Activity description can be found in the Main Estimates online.

Benefits for Canadians: Through its responsibilities under the *Species at Risk Act (SARA)*, the *Migratory Birds Convention Act, 1994*, the *Canada Wildlife Act*, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the *Convention on Biological Diversity*, including the Canadian Biodiversity Strategy, Environment Canada has helped protect ecosystems, genetic resources and species and has contributed to positioning Canada as a responsible environmental steward.

Performance Analysis: Collaborative implementation of the Canadian Biodiversity Strategy was advanced through a joint 2010 federal-provincial-territorial program of work that achieved results in a number of key areas: assessing ecosystem status and trends[17], reporting on Canada's progress towards the 2010 target[18], initiating research on the value of nature to Canadians, development of draft domestic policy guidance on access and benefit sharing of genetic resources, and implementing an engagement strategy[19] for the International Year of Biodiversity.

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[15] Page 24 of the 2009–2010 RPP includes the following detail: "The current goal is 3.44 million hectares, which is established in the 2004 Update to the North American Waterfowl Management Plan. This goal will be reviewed in 2010."

[16] The hectares reported here are only those hectares that were secured during the reporting period. The areas do not include contributions of the Canadian Intermountain Joint Venture or the Western Boreal Forest Program Area, as these were not part of the 2004 NAWMP goal.

[17] Draft thematic technical chapters of Canadian Biodiversity: Ecosystem Status and Trends 2010 have been completed and key findings developed, along with draft summary reports providing evidence for the key findings. Although slightly delayed, the full series of products, including a summary for decision-makers, will be released in 2010–2011 as a major deliverable for the 2010 International Year of Biodiversity.

[18] Canada's 4th National Report to the Convention on Biological Diversity was submitted to the CBD Secretariat in 2009. A supplementary report, "Caring for Canada's Biodiversity - Highlights of Canada's Fourth National Report," will be published in the 2010–2011 fiscal year.

[19] In support of the 2010 Engagement Strategy, new or enhanced education and communication tools were developed and promoted on the Canadian Biodiversity Information Network web site.

The Government of Canada continues to implement the *Species at Risk Act (SARA)*. In response to a public commitment, a suite of draft policies has been developed and communicated to stakeholders explaining how the federal government intends to use SARA to meet its obligations. The draft policies clarify key processes and inter-jurisdictional roles and responsibilities, which will improve coordinated action and enhance administrative efficiency in the ongoing implementation of SARA. In addition, significant changes to the recovery planning process took place in 2009 that allowed for a more streamlined approach to the development and posting of future recovery planning documents. As of March 31, 2010, 41 recovery strategies have been completed and 162 recovery strategies are under development.

In 2009–2010, Canada participated in the 15th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Effective communication and integration of Inuit views on a proposal to ban trade in polar bear resulted in a coordinated, science-based Canadian position which was supported by the majority of parties who recognized that trade is not affecting the status of polar bear. As a result, polar bear status remained unchanged in Appendix 2 of CITES. Environment Canada also successfully coordinated with Fisheries and Oceans Canada to balance conservation concerns and Canadian economic interests regarding a number of marine species. Ultimately, a principle-based Government of Canada position was achieved and supported during the CITES Conference of the Parties.

The Department continues to develop all-bird conservation plans for the 25 Bird Conservation Region (BCR) provincial areas. As of March 31, 2010, three of the six common elements of BCR plans have been completed. Once completed, BCR plans will provide a consistent framework for actions leading to the conservation of migratory birds and their habitats across Canada.

The Government of Canada is committed to protecting wetlands, waterfowl and other wetland-associated migratory birds under the North American Waterfowl Management Plan (NAWMP). The purpose of the NAWMP is to sustain abundant waterfowl populations by conserving landscapes and habitat. As of March 31st, 2009, Environment Canada, working with its partners, secured 60,246 hectares[20] of wetlands and associated upland habitats for migratory birds and species at risk through the NAWMP. In total, 2,376,067 hectares, representing 69.1 percent of the goal of 3.44 million hectares, have now been secured.

Environment Canada is working with a variety of partners to advance habitat conservation efforts in the North. Work continues on establishing new protected areas: six new National Wildlife Area (NWA) sites under the Northwest Territories Protected Areas Strategy, three new NWAs in Nunavut under the Inuit Impact and Benefit Agreement (completed), and the designation of Scott Islands, as a Marine Wildlife Area. In 2008, the government announced that the Sable Island, including its marine

[20] Hectares reported are the period hectares secured only. The areas do not include contributions of the Canadian Intermountain Joint Venture or the Western Boreal Forest Program Area, as these were not part of the 2004 NAWMP goal.

environment, would be protected as a NWA. In 2009–2010, Environment Canada worked with Parks Canada and held public consultations, concluding that it would be more appropriate to protect the area as a National Park. Parks Canada is now leading the work to create a National Park. All six candidate NWA sites in the Northwest Territories have been identified and designation is proceeding on schedule. The three new NWA sites in Nunavut were listed in the *Canada Gazette* in early June 2010. The new northern protected areas will play a key role in conserving vulnerable habitat in the face of a variety of threats, including climate change and industrial development. This will demonstrate the Government's commitment to a balance between conservation and development in Canada's North.

In addition, the Department completed plans to expand the enforcement program by 50 percent and established the strategic enforcement framework that defines the mission and long-term vision of the enforcement program. Doing so will enhance the Department's capacity to target high-risk compliance areas, and to respond to referrals and incidents. Additionally, the *Environmental Enforcement Act* received Royal Assent and will come in to force in 2011.

Lessons Learned: As stated in *Canada's 4th National Report to the Convention on Biological Diversity*, "enhancing long-term trend data will enable a more accurate assessment of the rate of biodiversity change and the effects of conservation and sustainable use of policies and practices."[21] Environment Canada and its partners must continue monitoring and collecting the long-term biodiversity trend data needed to make accurate assessments of the rate of biodiversity change and the effects of conservation and sustainable use policies and practices. The department has learned that clarifying key processes and inter-jurisdictional roles and responsibilities, along with a more streamlined approach to the development and posting of future recovery planning documents, will improve the ongoing implementation of SARA.

[21] Canada's 4th National Report to the Convention on Biological Diversity, p. 122.

Program Activity: Water Program					
2009–2010 Financial Resources ($ millions)			2009–2010 Human Resources (full-time equivalents)		
Planned Spending	**Total Authorities**	**Actual Spending**	**Planned**	**Actual**	**Difference**
94.3	99.2	87.4	588	610	22
Expected Results	**2009–2010 Performance Status Rating**	**Performance Indicators**	**Targets**	**2009–2010 Performance Summary**	
Reduced risks to aquatic ecosystems resulting from human activity	☐ Somewhat Met	Percentage of water bodies included in the Canadian Environmental Sustainability Indicators Freshwater Quality Index whose quality was rated as either good or excellent	Available data are presently insufficient to report meaningful national trends for this indicator, thus no specific policy target has yet been established	Over three years of data roll-up (2005-2007) 38.6% (59/153) of core national sites monitored were qualified as either good or excellent in the Water Quality Index. About 80% (12/15) of monitored river basins showed some sites with Water Quality Index rating of either good or excellent.[22] Note: In the absence of a target for the performance indicator, the performance rating is based on a qualitative assessment by program management of the degree of progress achieved in meeting the commitments identified in the 2009–2010 RPP.	

The Program Activity description can be found in the Main Estimates online.

Benefits to Canadians: Environment Canada worked with its partners to conserve and protect the health of Canada's aquatic ecosystems and water resources by developing strategic approaches and implementing actions that address significant freshwater issues. For example, Environment Canada's efforts to deliver the Action Plan for Clean Water is cleaning up polluted bodies of water across the country, including Lake Winnipeg and Lake Simcoe, as well as several areas of concern in the Great Lakes, such as the Niagara River. Protecting and conserving our water is important so that present and future generations of Canadians have access to clean water and a healthy environment.

[22] Water quality data was provided for the 2009 CESI Water Quality Indicator report and Environment Canada made progress on the development of a Water Demand and Availability indicator, which will improve our ability to report to Canadians on the availability of water resources in Canada and the effectiveness of management approaches.

Performance Analysis: In 2009–2010, Environment Canada provided support to Foreign Affairs and International Trade Canada in drafting legislation[23] to strengthen prohibitions on the bulk removal of Canada's water outside the country. The Department delivered on commitments to domestic water boards such as the Prairie Provinces Water Board, Mackenzie River Basin Board, and St. Croix River Board, as well as the International Joint Commission (IJC) through its ongoing participation and provision of water quality science and resource management information and expertise. Environment Canada also worked with provinces and territories through the Canadian Council of Ministers of the Environment (CCME) to develop a strategic, forward-looking framework that will guide CCME in its future actions and activities related to water.

In 2009–2010, Environment Canada delivered on the second year commitments of the Action Plan for Clean Water by carrying out its work to restore Lake Simcoe, Lake Winnipeg, and areas of concern in the Great Lakes. In particular, the Department developed and implemented contaminated sediment management strategies for Great Lakes sediment remediation, administered the Lake Simcoe Clean-up Fund, and provided leadership, science and expertise to the Lake Winnipeg Basin Initiative by working on the development of a Canada-Manitoba Agreement with the province of Manitoba. Environment Canada also administered rounds two and three and initiated a call for round four of the Lake Winnipeg Basin Stewardship Fund, and developed, as part of the Lake Winnipeg Basin Initiative, a decision support system that allows the integration of watershed and lake models.

Environment Canada continued to support Fisheries and Oceans Canada and the Canadian Food Inspection Agency (which is the lead) in delivering the Canadian Shellfish Sanitation Program under a memorandum of understanding. The Department conducted water quality sampling and analysis to protect the health and safety of Canadians by surveying 15,000 km^2 of marine waters along Canada's Pacific and Atlantic coastlines (including the St. Lawrence estuary) and close to 1,000 shellfish harvesting areas. In 2009–2010, 40,000 water samples were collected and analyzed, 38 studies of wastewater treatment plants discharging into shellfish harvested areas were undertaken; an inventory of pollution sources impacting coastal environments was updated; and six of our microbiology laboratories were accredited to ISO 17025.

Environment Canada provided leadership on aquatic ecosystem science and conducted research, monitoring and analytical services on priority areas that are essential to support responsible decision making. The Department continued to implement the Canadian Aquatic Biomonitoring Network in collaboration with partners for assessing the health of freshwater ecosystems in Canada and is on target with expanded national reference conditions being established on key watersheds.

Activities associated with aquatic biomonitoring were undertaken as part of key priority domestic and international water-related initiatives associated with the Fraser Basin, Yukon River Basin, the Boreal Upland Ecoregion (including Prince Albert and Riding Mountain National Parks), Lake of the Woods and Lake Saint-Pierre (St. Lawrence

[23] Proposed legislation was introduced in Parliament in May 2010.

River). Activities were recently initiated in the Atlantic Provinces. Tailings ponds, water quality and water quantity monitoring and research were also carried out to support departmental work related to the oil sands and the sustainability of water resources in the Athabasca River. Work related to fingerprinting compound(s) analysis also advanced which may help Environment Canada determine more specifically the nature and source of contaminants found in the Athabasca River.

A broad review of the federal-provincial water quality monitoring networks was undertaken and recommendations have been prepared for future departmental action. A coordinated science and monitoring initiative was developed to improve collaboration between Canadian and U.S. agencies involved in water quality science and monitoring on the Great Lakes. Finally, a review of the Canada-British Columbia Water Quality Monitoring Agreement was conducted and some adjustments to improve monitoring efficiency and effectiveness were implemented. Network gaps in coverage and associated risks were identified for future action.

Lessons Learned: Integrated and collaborative research and monitoring projects are underway under the Lake Winnipeg Basin Initiative to achieve a better understanding of the gaps related to ecology and nutrient cycling. The Department has learned that by understanding the sources and transport mechanisms for nutrients, more robust nutrient objectives can be developed for the lake along with performance indicators that will guide abatement investments and better enable assessment of the health of the lake and watershed. This effort is an important component of Canada's Action Plan on Clean Water.

Environment Canada participated in two U.S. Food and Drug Agency audits and one European Union audit of the Canadian Sanitation Shellfish Program, and will review and address feedback once received by respective auditors.

Program Activity: Ecosystems Initiatives Program					
2009–2010 Financial Resources ($ millions)			2009–2010 Human Resources (full-time equivalents)		
Planned Spending	**Total Authorities**	**Actual Spending**	**Planned**	**Actual**	**Difference**
40.2	42.4	35.4	283	218	(65)
Expected Results	**2009–2010 Performance Status Rating**	**Performance Indicators**	**Targets**	**2009–2010 Performance Summary**	
Beneficial uses and environmental quality in priority ecosystems are maintained or restored	☐ Mostly Met	Index assessing the overall progress made against near-term objectives[24] of Environment Canada's six[25] priority ecosystem initiatives (PEIs)	100 by March 2010[26]	The Ecosystem Initiative Index at the end of 2009–2010 is estimated to be 93. This value represents a combined score of qualitative management assessments for each of the near-term goals of the Ecosystem Initiatives, expressed on a scale of 1 to 100. This score is based on assessments for three Ecosystem Initiatives: Great Lakes, St. Lawrence and Atlantic. The performance status rating is based on the indicator as well as on progress achieved in negotiations with other jurisdictions on renewal of the Great Lakes Water Quality Agreement, the Canada-Ontario Agreement respecting the Great Lakes Basin Ecosystem, and the Canada-Quebec Agreement on the St. Lawrence.	
Potential significant adverse environmental effects of projects/plans/ programs/ policies subject to	✚ Exceeded	Proportion of projects referred to an environmental assessment panel for which Environment Canada provided	75% by 2009–2010 90% by 2010–2011	All of Environment Canada's substantive issues, as presented to environmental assessment panels in the 2009–2010 operating year, were reflected in the government decision. The Department thereby exceeded	

[24] Each of Environment Canada's priority ecosystem initiatives have set out near-term objectives related to reducing the impact of harmful substances and improving environmental quality.
[25] The performance indicator was adjusted in September 2009 to reflect that only three Ecosystem Initiatives were implemented in 2009–2010 and not six.
[26] Details on meaning of "100"can be found on page 30 of the 2009–2010 Reports on Plans and Priorities.

federal environmental assessment legislation and Cabinet directives are avoided or mitigated.		expert environmental assessment advice on potential significant adverse environmental effects where that advice was incorporated and reflected into the decision		the target of 75%.

The Program Activity description can be found in the Main Estimates online.

Benefits for Canadians: Environment Canada's work on this program encourages and supports individuals and organizations to enhance or maintain the sustainability of ecosystems in Canada. For example, ecosystem initiatives such as the Great Lakes Basin Ecosystem Initiative, the St. Lawrence Plan and the Atlantic Ecosystem Initiative contribute to action on and preservation of ecosystem health and the beneficial uses that follow. An important part of this success can be attributed to the work of local stakeholders in devising and implementing just under 50 local environmental or remedial action plans. These plans receive financial and technical support from the Department and benefit the communities in which they take place.

Through the provision of scientific advice and expertise, Environment Canada facilitated more informed decision making by identifying and mitigating the potential environmental impacts of two large development projects subject to a federal decision in the reporting period.

Findings from the *Evaluation of the EcoAction Community Funding Program* indicate that the program provides an important source of support for community-based environmental projects. The Environmental Damages Fund (generated from fines levied for contravention of federal environmental laws) provided direct benefits to Canadians in communities across the country in the form of improvements, restoration, and protection of local environments as well as improved accountability for these investments.

Performance Analysis: Progress has been made in advancing the understanding of an ecosystem approach[27]. This has been achieved by completing an analysis of current and potential departmental actions in 12 out of 17 vulnerable ecosystems and "hotspots" across the country (the remaining five will be considered in 2010–2011) and by continued efforts to integrate an ecosystem-based approach into the decision making processes of the Department. As well, a new Coastal and Oceans Engagement Framework is being used by the Department for priority setting and program guidance.

[27] An approach that seeks to integrate science, regulatory and outreach activities to improve ecosystem health.

Environment Canada is actively participating in negotiations to amend the Great Lakes Water Quality Agreement (GLWQA) led by Foreign Affairs and International Trade Canada. This is an important and substantive event for both Canada and the United States. For Canada, it represents an opportunity to influence decision-making in both countries to benefit a natural resource that has significant environmental, economic and human health implications for many Canadians. A Great Lakes Strategic Framework was developed and an agreement was reached with the Government of Ontario on March 4, 2010, on how the framework will be used to support the domestic Great Lakes agenda.

Two other keystone agreements are noteworthy: a one-year extension of the Canada-Ontario Agreement respecting the Great Lakes Basin Ecosystem (2007–2010) was approved by the Minister to allow time for negotiations with the U.S. on a revised GLWQA; and the 2005–2010 Canada-Quebec Agreement on the St. Lawrence terminated in March 2010. Negotiations with the Government of Quebec have begun on a new agreement. Environment Canada is leading the negotiations on behalf of the federal government and working with eight departments and agencies.

The EcoAction Community Funding Program delivered 206 projects through contribution agreements in 2009–2010. Of these, 125 were new projects representing a departmental investment of $4.2 million. These projects leveraged $10.3 million in cash and in-kind support, which translates to $2.45 leveraged for every dollar of federal funding with an average of 5.6 partner sectors[28] involved in each project. The program funded 54 percent of project applications received. In support of the International Year of Biodiversity 2010, 54 biodiversity-related projects were funded for a total of $1.65 million in federal funding. These projects will reduce biodiversity loss, protect wildlife and improve species habitat, and increase urban re-naturalization. Climate change-related projects to reduce greenhouse gas emissions represented 35 percent of new projects funded for a total of $1.7 million in federal funding. The remaining projects focused on clean water (23 percent) and clean air (4 percent) initiatives. Over 420,000 individuals were engaged in EcoAction projects across Canada, including 108 jobs created and 2,574 volunteers.

Environment Canada met all of its obligations under *Canadian Environmental Assessment Act* (CEAA) as both a responsible authority and a federal authority. In general, Environment Canada conducts and/or contributes to approximately 2,500 environmental assessments each fiscal year. In 2009–2010, two panel environmental assessments were concluded; the Dunvegan hydroelectric power project in Alberta, and the La Romaine hydroelectric project in Quebec. In both cases, Environment Canada participated as a federal authority, and the Department's advice and recommendations were accepted by either the panel (for La Romaine) or the proponent prior to the panel hearing (for the Dunvegan project). Environment Canada's main areas of interest for

[28] Partner sectors include: municipal, provincial or federal governments, private sector, industry associations, non-governmental organizations, academic institutions, charitable foundations, and individuals.

these two projects included migratory birds and bird habitat, water and air quality, and greenhouse gas emissions.

The Environmental Damages Fund (EDF) secured new administrative resources to improve the management and increase the promotion of the EDF. These efforts are the result of amendments to the *Environmental Enforcement Act* that will allow fines from environmental convictions to be directed to the EDF, when the Act comes into force in 2011. In 2009–2010, twelve court awards were directed to the EDF for a total of $287,000 and twenty-seven projects were funded across the country. Promotional activities were undertaken among Environment Canada enforcement officers and federal prosecutors of the Public Prosecution Service of Canada to increase their awareness and understanding of the Environmental Damages Fund.

Lessons Learned: The announcement in June 2009 of the beginning of negotiations to amend the GLWQA and the development of the future directions for both the Great Lakes and St. Lawrence Ecosystem Initiative programs emphasize the importance of building on best practices related to the development and implementation of ecosystem initiatives, such as the early identification of new and emerging challenges, and of recognizing the added value of public engagement and input.

Regarding Environment Canada's involvement in the environmental assessments of large-scale development projects, the Department has reinforced the message that early engagement with proponents can influence and improve project plans to minimize environmental impacts while expediting the panel hearing process.

To increase the legal community's confidence in and awareness of the Environmental Damages Fund, the consensus from enforcement staff and prosecutors was that a feedback mechanism must be established to provide information on the types of projects being funded and results achieved through funds directed to the EDF. The program has developed factsheets geared to prosecutors and enforcement, and will be launching a new website to provide details on projects funded.

Strategic Outcome 2: Weather and environmental predictions and services reduce risks and contribute to the well-being of Canadians

Description: Changing weather, water and climate conditions, such as severe weather, floods, poor air quality and heat waves, can seriously affect Canadians' safety, health and economic well-being. Environment Canada works to provide quality meteorological, climatological, hydrological and related environmental information, prediction and services that help Canadians make decisions to reduce the risks posed by the environment and/or to enhance economic activities.

Performance Analysis:

Performance Indicators	Targets	2009–2010 Performance Summary
Percentage of respondents who indicate that weather forecasts "always" or "usually" provided enough information to be useful	85% by March 2012	The percentage of respondents indicating that weather forecasts "always" or "usually" provide enough information to be useful went from 76% in 2002 to 80% in 2007. The next survey is planned for 2012. This progress resulted from continuous improvements to forecast accuracy including the enhancement of the atmospheric models, as well as the standardization of content, and improved dissemination services to better meet user needs. Based on feedback from Canadians received by the Environment Canada's National Inquiry Response System in 2009–2010, information related to precipitation and wind are areas for improvement.
Number of visits / sessions to Environment Canada's Weatheroffice website	275 million by March 2010	The number of visits between March 2009 and March 2010: 539,789,323 Focus group consultation yields information on user needs and feedback on proposed changes, which have been used to improve the Weatheroffice website content and accessibility.
Percentage of respondents who indicate that they "always" or "most of the time" receive enough notice of a winter storm to take preparatory action	85% by March 2012	The percentage of respondents indicating they "always" or "most of the time" receive enough notice of a winter storm to take preparatory action went from 81% in 2002 to 84% in 2007. The next survey is planned for 2012. These results have been fairly stable between 2002 and 2007; however, public forecast coverage increased from 5 to 7 days in 2009 and an associated improvement in performance is expected.

There are two Program Activities under this Strategic Outcome:

- Improved knowledge and information on weather and environmental conditions influences decision making
- Canadians are informed of, and respond appropriately to, current and predicted environmental conditions

Program Activity: Environmental Science and Monitoring Program					
2009–2010 Financial Resources ($ millions)			2009–2010 Human Resources (full-time equivalents)		
Planned Spending	**Total Authorities**	**Actual Spending**	**Planned**	**Actual**	**Difference**
90.4	108.2	105.8	728	710	(18)
Expected Results	**2009–2010 Performance Status Rating**	**Performance Indicators**	**Targets**	**2009–2010 Performance Summary**	
Environment Canada and partners receive high-quality observations that allow them to identify, analyze and predict weather, air water and/or climate conditions	☐ Mostly Met	Percentage of monthly reports from the 87 stations in the climate observing network that meet World Meteorological Organization (WMO) standards	85% by March 2010	Environment Canada's monitoring networks continued to provide observations of air quality, water level and derived flow, weather and climate information, 24 hours a day, 7 days a week from all network sites in Canada. Ninety percent of the climate stations met WMO standards while weather radar was available to Canadians, 94% of the time. Canadians and others downloaded 7,700 gigabytes of data in 2009 from the Department's online climate archive and also had access to real-time and archived water information online.	
		Percentage of time that weather radar is available to forecasters and the public	95% by March 2010		
Environment Canada and partners receive high-quality weather and environmental prediction information (or models) that allow them to identify, analyze and predict weather, air, water and/or climate conditions	☐ Mostly Met	Rank of Canada's global weather model among other global weather models	Canada's weather model is ranked in the top five by April 2009	Canada's global weather model ranked 6th out of the ten main global models that verify the 24 hour forecast over the entire Northern Hemisphere.	

The Program Activity description can be found in the Main Estimates online.

Benefits for Canadians: Better observational data and a stronger scientific foundation yield improved accuracy and lead times for warnings of severe weather, thus improving the safety margin for Canadians. Furthermore, they provide a stronger scientific basis for policy development and decision making pertaining to key environmental issues and their implications. As a result, Canadians and their institutions can better adapt to manage the risks they face from changes in the environment as well as benefit from the opportunities in fields such as agriculture, forestry or renewable energy. This program, by helping Canadians anticipate how the environment can affect them or their activities, contributes to reducing the negative impacts – including loss of life, detrimental effects on health and damage to property – that changing weather, water or climate conditions can have on Canadians. Furthermore, it provides government and policy-makers with short and long-term information on changes to the environment to support the development of regulations and policies, for example on air quality, water levels and climate change.

Performance Analysis: The Department has made progress in implementing an integrated investment planning approach but continued to face challenges with respect to its weather observing networks and in assessing its knowledge of the effectiveness of its programs. A forward-looking strategy is being developed, identifying key risks, ways forward and areas requiring investment to enable Environment Canada to position itself for the future. This strategy includes a plan and vision for advancing the efforts to address critical gaps in the monitoring infrastructure, including a pilot project for the asset life-cycle management system. This has involved testing the application for the Aviation, Marine, Surface and Upper Air Monitoring Networks by engaging the key program people who are responsible for entering and maintaining asset data for these networks. Further testing of the application and solution design will be conducted prior to the launch of the pilot project currently scheduled for this fall.

In response to the December 2008 report of the Commissioner of the Environment and Sustainable Development[29] (CESD) audit recommendations, the Department is developing a long-term strategic plan for monitoring which defines the strategic direction, strategies, and milestones necessary to restore and sustain the integrity of its severe weather and climate monitoring program. Key areas of progress to date include: systematic assessment of user requirements (with initial focus on severe weather); establishment of a framework for participation in a "Network of Networks" (including technical and policy guidelines on data quality and data sharing); and the establishment of memoranda of understanding (MOUs) with provinces for voluntary data exchange.

The Department also made advances in scientific knowledge, capacity and transfer of research to operations. New versions of the regional and global numerical models (Global Environmental Model) were put into operation in June 2009, resulting in significant quality improvements in the medium-range forecasts. Environment Canada received international and national recognition of its meteorological research project at the Vancouver 2010 Olympic and Paralympic Games, which used an array of measuring instruments, high-resolution forecast models and nowcasting (very short-term forecasts)

[29] This recommendation and the Department's response appear in paragraph 2.36 on page 13 (pdf version) of the Report.

techniques to provide forecasts of weather conditions, down to the scale of a single Olympic event.

Lessons Learned: The Department learned that it needs to develop an up-to-date strategy to address challenges in managing its monitoring networks, as highlighted in the December 2008 CESD report. A more strategic and holistic approach is needed to establish better tracking mechanisms to ensure the viability of the system. In response, a fully costed forward-looking strategy that incorporates a monitoring strategy and a long-term capital plan is being developed to begin moving forward on this lesson.

The Vancouver 2010 Olympic and Paralympic Games also provided a learning opportunity through the "Science and Nowcasting Olympic Weather for Vancouver 2010" (SNOW V10) program under the World Weather Research Program (WWRP). Launched by the World Meteorological Organization (WMO), experts from around the world including a team of Environment Canada employees collaborated to lead the way in nowcasting winter weather research. The knowledge gained will be useful in improving winter forecasting techniques in Canada and in developing partnerships around the world.

Program Activity: Weather and Environmental Prediction Program					
2009–2010 Financial Resources ($ millions)			**2009–2010 Human Resources (full-time equivalents)**		
Planned Spending	**Total Authorities**	**Actual Spending**	**Planned**	**Actual**	**Difference**
86.4	93.0	90.9	1065	966	(99)
Expected Results	**2009–2010 Performance Status Rating**	**Performance Indicators**	**Targets**	**2009–2010 Performance Summary**	
Canadians use weather forecasts for decision making	☐ Mostly Met	Percentage of Canadians who indicate that they seek out weather forecasts at least once per day	90% by March 2012	The percentage went from 92% in 2002 to 89% in 2007. The next survey is planned for 2012. The lack of recent data in addition to over 25,000 inquiries from Canadians looking for more information and/or improvement in some areas gives an indication that issues still exist. Based on the 2009–2010 statistics from the Weather office web site, usage of automated telephone answering devices (ATADs) and Weatheradio, the target has been mostly met.	
		Percentage of Canadians who indicate usage	35% by March 2012	The percentage went from 21% in 2002 to 47% in 2007. The next survey is	

		of Environment Canada's weather and environmental information dissemination tools (ATADs, Weatheradio, Weatheroffice)		planned for 2012. Recent consultation with manufacturers of Weatheradio receivers indicate that their sales are increasing each year. An analysis of the ATADs network done in 2008 indicates that there are approximately 50 million calls every year.
Weather- and climate-sensitive industries, governments and institutions are aware of and benefit from Environment Canada's weather, climate, water and other services in their economic decision making and planning	■ Met All	Client satisfaction, on a scale of 1 (excellent) to 5 (unsatisfactory), averaged across all service quality categories and across the four NAV CANADA-specified Environment Canada operations	3.0 by April 2010	Result : 2.1 (based on a different survey) Note: In previous years, this indicator was based on a survey administered by NAV CANADA which provided an overall score for performance against NAV CANADA-specified objectives (Responsiveness, Quality Improvement, Ease-of-Use, Predictability, Technology and Capability) for services provided by Environment Canada. The NAV CANADA survey has been replaced by an Environment Canada-administered consultation that generates a similar scoring based on the clients' perception of how they are treated (e.g., "I feel that the Meteorological Service of Canada [MSC] treats me as a valued client.") and of how the MSC meets their needs.

The Program Activity description can be found in the Main Estimates online.

Benefits for Canadians: Weather and environmental information and predictions enable Canadians and their institutions to prepare for and take appropriate actions to safeguard life and property, adopt strategies to mitigate vulnerabilities to air pollution and the changing climate, and prosper through decisions that advance economic competitiveness and individual well-being. In 2009–2010, for example, this was demonstrated through strong coordination with emergency measures organizations and environmental emergency agencies during major meteorological events, the expansion of the Air Quality

Health Index Program to 14 new sites across Canada, and various enhancements to the Automated Telephone Answering Devices (ATAD), the Weatheroffice website and Weatheradio systems to increase reach and ensure effective delivery of weather information to Canadians in both official languages. All of these efforts help Canadians better manage their activities in light of changing weather, water and climate conditions. Finally, meteorologists across the country worked hard to provide forecasts and weather warnings that were essential for the safety and security of athletes, officials, spectators and visitors, and for proper planning and preparation of the 2010 Olympic and Paralympic Games.

Performance Analysis: The Department continued to provide its weather and related services 24 hours a day, 7 days a week. It demonstrated particular success in forecasting major events such as 41 tornadoes during the summer of 2009 and Hurricane Bill. However, more work is needed to understand where our forecasting systems can improve their performance and in preparing Canadians to respond to the warning information they receive. Environment Canada was a major contributor to Public Safety Canada's federal response to the Red River and St. John River floods of spring 2009. As well, the weather services provided during the Vancouver 2010 Olympic and Paralympic Games resulted in international and national recognition, and the Canadian approach is being considered by other countries such as Russia who will host the next Winter Olympic Games.

Problems were revealed with the tools used by Environment Canada meteorologists to prepare and disseminate a high volume of weather warning bulletins during very unusual conditions of multiple extreme weather events happening in a short period of time. In 2008, the Commissioner of the Environment and Sustainable Development (CESD) conducted an audit on the way Environment Canada manages its severe weather-warning program, identifying a number of issues with the Department's ability to deliver severe weather warnings to Canadians in a sustainable manner. The Department agrees with these findings and is developing a comprehensive strategy to improve the effectiveness of the existing warning systems and to explore new technologies.

Improvements were also made to Environment Canada's forecasting tools through the implementation of the Ninjo forecaster workstation and pilot hydrometric workstations, despite some delays due to software and capacity issues and operational testing of the Canadian Airport Nowcasting (CAN-Now), very short-term forecasting, is underway at two major airport hubs: Toronto and Vancouver.

Significant scientific advances were made in computer modeling, with the operationalization of new versions of regional and global numerical models (Global Environmental Model) in June 2009, and improved data assimilation for medium-range forecast models. The Air Quality Health Index (AQHI) Program has been accepted by nearly all provincial partners, local partners and the media. It has become one of the most successful programs under the Adaptation Theme in the Government of Canada Clean Air Agenda and it has been identified as a model in terms of government consultation. An evaluation of the program, completed in February 2010, found that the program was generally on track in meeting its stated goals and appears to be a cost-effective and well-

managed program. The Canadian global climate model has been developed into an internationally competitive Earth System Model and is being used to produce new climate change projections for the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report. The Department was also involved in furthering understanding of climate change, particularly in the North, through leadership of the Canadian collaborative project *Variability and Change in the Canadian Cryosphere*[30] conducted under the auspices of the International Polar Year.

Following the November 2008 audit of the bilingual capacity of Environment Canada's automated telephone network for weather forecasts, the Department has upgraded its equipment to ensure it is fully compliant with the *Official Languages Act*.[31] This service receives approximately 50 millions calls every year and is available to 28 millions Canadians. Environment Canada's Weatheradio network, which broadcasts weather and environmental information 24-hours a day direct from Environment Canada's Storm Prediction Centres, operated 97 percent of the time in 2009–2010. Furthermore, a three-year project is underway for distributing Weatheradio receivers to every school in Canada. Service commitments were also met and user satisfaction was high for targeted users, such as the marine community, Canadian Coast Guard and Department of National Defence; however, demands are increasing, particularly in the North, due to an extended shipping season as a result of climate change. As recommended in the CESD audit, there was a need to verify the quality of severe weather warnings throughout the year. A comprehensive set of performance indicators for all departmental programs, including those under this Program Activity, was implemented on April 1, 2010.

Steps were taken to build a quality management system (QMS) culture and to ensure re-registration of activities under the ISO 9001:2000 standard. A business continuity plan was completed and significant work was undertaken to simulate various scenarios in the face of a potential influenza pandemic. Furthermore, a business case was developed to help guide Environment Canada in the optimization of its resources over the next ten years.

Lessons Learned: Environment Canada's approach in the development and implementation of the weather services at the Vancouver 2010 Olympic and Paralympic Games has been a model for other programs within Environment Canada's meteorological services. The new technologies that were put in place helped Environment Canada understand more about forecasting weather in the mountains and along British Columbia's coast than ever before. These findings will be used to improve local and national weather forecasts for Canadians and will also be shared with meteorological organizations around the world, improving global understanding of weather.

Working collaboratively with a wide variety of provincial governments and other stakeholders, such as NAV CANADA, which in July signed a new long-term agreement with Environment Canada for the provision of aviation weather services, yields strong,

[30] The term Cryosphere refers to frozen surfaces: ice, snow and permafrost.
[31] Office of the Commissioner of Official Languages, Audit of the Bilingual Weather and Environmental Services Provided on the Environment Canada Automated Telephone Network, November 2008.

constructive relationships–a key factor in the successful communication of weather hazards. For example, during the Vancouver 2010 Olympic and Paralympic Games other authorities sought advice from Environment Canada's weather and environmental services for their decision making. The knowledge and experience gained about effective engagement with clients and stakeholders will be used to further the services provided to Canadians through improved collaboration with other governments and emergency measures organizations (EMOs), for instance, during local severe weather events across Canada.

Strategic Outcome 3: Canadians and their environment are protected from the effects of pollution and waste

Description: Environment Canada delivers regulatory and non-regulatory action, incentive programs, and scientific research and monitoring to protect Canadians and their environment from the effects of pollution and waste. The *Canadian Environmental Protection Act, 1999* and section 36 of the *Fisheries Act* provide the statutory basis for most of Environment Canada's activities that make progress towards this Strategic Outcome.

Performance Analysis:

Performance Indicators	Targets	2009–2010 Performance Summary
Canadian emissions of greenhouse gases (carbon dioxide equivalents) in megatonnes (MT)	Total national emissions of 607 MT by 2020 based on current estimates and as part of a national effort by all governments in Canada[32]	Total GHG emissions in 2008 were 734 MT of carbon dioxide equivalent (CO2eq).[33] Key regulatory steps have been taken in the transportation sector to reduce GHG emissions from new cars and light trucks and to increase the use of renewable fuels. Progress was made in completing analytical work required to harmonize with emerging U.S. climate change policy, specifically either for a North American cap-and-trade system or a sector-by-sector regulatory approach. The Department has worked closely with the provinces and territories as the approach to reduce emissions is being developed and has launched two working groups to ensure federal-provincial-territorial coordination on domestic and international climate change approaches.
Canadian ambient ground-level ozone levels measured in parts per billion (ppb)	Targets will be determined with the finalization of the air pollutant regulatory framework.	For 2008, the Canadian ambient ground-level ozone levels were 37.5 ppb. The Canadian ambient fine particulate matter ($PM_{2.5}$) level was 8.1 ug/m3.[34] A *Comprehensive Air Management System (CAMS) – A Proposed Framework to Improve Air Quality Management* was developed through joint work with provinces, industry and non-governmental organizations. The framework proposes a target range for ground-level ozone and particulate matter to be finalized in 2010.
Canadian ambient fine particulate matter ($PM_{2.5}$) levels measured in micrograms per cubic metre ($\mu g/m^3$)		

In 2008,[35] Canada's greenhouse gas emissions decreased 2.1 percent from 2007 levels, attributed partly to a slowdown in economic growth that began in 2008, and the utilization of greater amounts of hydropower for electricity generation. Although emissions in 2008 were 24 percent above the 1990 total of 592 MT, the growth trend has

[32] In January 2010, the Government of Canada revised its national target to reduce GHG emissions to 17 percent below 2005 levels by 2020, to align with the U.S. target, and has inscribed this target in the Copenhagen Accord.

[33] Canadian Environmental Sustainability Indicators – Greenhouse Gas Emissions: http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=FBF8455E-1

[34] Canadian Environmental Sustainability Indicators – Air Quality: http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=4B5631F9-1

[35] Data for 2009–2010 data are not yet available.

slowed in recent years, and emissions since 2003 have decreased by 0.8 percent.[36] The Government is committed to a national target of reducing Canada's total greenhouse gas emissions by 17 percent from 2005 levels by 2020.

Air quality indicators include measures of two key elements of smog—ground-level ozone and fine particulates ($PM_{2.5}$)—which can cause harm and health problems when they come into contact with living things.[37] According to the Canadian Environmental Sustainability Indicators 2008,[38] national average levels of ground-level ozone increased in Canada by 13 percent between 1990 and 2007 and there were no significant changes in the average level of fine particulates over the 2000 to 2007 period.[39]

Environment Canada's work contributing to this Strategic Outcome was organized into three Program Activities:

- Chemicals Management Program
- Legislation and Information Program
- Clean Air Program

Program Activity: Chemicals Management Program					
2009-2010 Financial Resources ($ millions)			**2009-2010 Human Resources (Full-time Equivalents)**		
Planned Spending	**Total Authorities**	**Actual Spending**	**Planned**	**Actual**	**Difference**
127.2	132.0	120.1	863	916	53
Expected Results	**2009-2010 Performance Status rating**	**Performance Indicators**	**Targets**	**2009-2010 Performance Summary**	
Risks to Canadians and impacts on their environment posed by toxic and other substances of concern are reduced.	☐ Mostly Met	Number of existing commercial substances under the Chemicals Management Plan assessed for risk to human health and/or the environment	4,300 by 2020	1,250 existing commercial substances under the Chemicals Management Plan were assessed for risk to human health and/or the environment to date. In 2009–2010, 259 existing substances were under risk assessment.	
		Percentage of new commercial substances, for which Environment	100% by March 31, 2010	97% of the 482 New Substances Notifications (NSNs) received in 2009–2010 were assessed in accordance with the	

[36] Canada's 2008 Greenhouse Gas Inventory: A Summary of Trends: 1990–2008: p. 1. http://www.ec.gc.ca/ges-ghg/059064OB-87F7-449A-AA8F-D5674A7BAC57/2010%20Annual%20Summary%20of%20Trends.pdf

[37] Canadian Environmental Sustainability Indicators (CESI) 2008: http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=4B5631F9-1.

[38] 2009–2010 data is not yet available.

[39] CESI 2008: http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=4B5631F9-1.

		Canada has been notified by industry of their intended use, that are assessed to determine if toxic within the timelines in the Regulation		regulatory requirements.
		Percentage of substances added to the List of Toxic Substances for which at least one risk management instrument has been developed within legally mandated timeframes	100% by March 31, 2010	At least one risk management instrument, such as a regulation, code of practice, or environment performance agreements, was developed within legally mandated timeframes for 100% of substances added to the List of Toxic Substances.

The Program Activity description can be found in the Main Estimates online.

Benefits for Canadians: Chemical substances may have a direct, harmful effect on animals, plants or humans, or may, depending on their volume, nature and manner of release, pose a long-term risk to the environment and human health. The Chemicals Management Plan is a national program focused on protecting the health of Canadians and the environment from the potential risks posed by chemicals.

The Plan makes Canada a world leader in assessing and managing the risks associated with substances that are used in thousands of industrial and consumer products. The benefits of this are an improved information base, regulatory clarity and predictability for industry, and protection of Canadians and the environment from the potential risks posed by commercial chemicals.

In addition to the Chemicals Management Plan, the Department's work aligned to this Program Activity encompasses regulatory and non-regulatory initiatives that reduce the risks to Canadians and impacts on the environment associated with harmful substances from consumer products, industrial and commercial activities. These initiatives include, for example, a number of regulatory programs to manage and monitor risks to water quality, fish and fish habitat for the mining, pulp and paper and wastewater sectors.

Performance Analysis: The Government of Canada continued to implement the Chemicals Management Plan and met all of the deliverables within the established timelines. In 2009-2010, 259 existing substances were under risk assessment that led to the issuance of 44 substance profiles, 63 draft screening assessments and 152 final screening assessments.

Environment Canada and Health Canada communicate progress on the assessment of the 195 highest priority substances under the "Challenge" initiative through the Government of Canada's Chemical Substances Portal and they are working with industry to develop satisfactory management plans for each of the substances that have been found toxic after scientific examination or for those that are strongly suspected of being dangerous. Environment Canada and Health Canada have initiated the development of risk management actions on Challenge substances such as bisphenol A, BNST, isoprene and toluene diisocyanates.

Environment Canada and Health Canada also conducted research, monitoring and surveillance to better understand the exposure and effects of a variety of chemicals that were identified as priorities under the Chemicals Management Plan. Strategies to address medium-priority substances using a sectoral approach were being developed where possible.

In addition to the Chemicals Management Plan, Environment Canada continued to implement its regulatory framework pertaining to the export and import of hazardous materials and hazardous recyclable materials in accordance with its international obligations under the Basel Convention. Further, it worked to evaluate and improve existing national instruments, such as an amendment to PCB regulations, a pollution prevention plan respecting releases of mercury from dental amalgam wastes and switches from automobiles, batch waste incinerator guidelines, and a landfill leachate evaluation program, all aimed at improving the management of hazardous and non-hazardous waste in Canada. Environment Canada, alongside provincial and territorial governments, committed to working on the Canada-wide Action Plan for Extended Producer Responsibility and a Canada-wide Strategy for Sustainable Packaging approved by the Canadian Council of Ministers of the Environment (CCME).

The Department also made progress in implementing the CCME Canada-wide Strategy for the Management of Municipal Wastewater Effluent by publishing draft regulations under the *Fisheries Act* for wastewater facilities. Proposed *Wastewater Systems Effluent Regulations* were published in the *Canada Gazette*, Part 1, in March 2010. The regulations, when in force, will address the largest source of pollution to surface water in Canada through minimum national effluent quality standards for the more than 3700 wastewater systems under municipal, provincial, or federal government operation, and those on federal land and Aboriginal land.

The 2007 report on compliance with the *Metal Mining Effluent Regulations* was published in March 2010. The report demonstrates a greater than 95 percent rate of compliance with the effluent quality standards set out in the Regulations. Environmental effects monitoring studies were also undertaken by mines subject to the Regulations, and initial results indicate that mine effluents are not having significant impacts on the receiving aquatic environments. Significant progress has been made in streamlining the regulatory process for amendments to the *Metal Mining Effluent Regulations* by incorporating information and consultation requirements of the regulatory process into the environmental assessment process.

In addition, the Department continued to advance Canada's objectives regionally and globally through its efforts under the Commission for Environmental Cooperation, the United Nations Environment Programme and numerous United Nations conventions, and the Organisation for Economic Co-operation and Development. Through these efforts, the Department actively participated in, and advanced, Canadian interests in discussions on green growth, international environmental governance, the addition of nine new substances to the Persistent Organic Pollutants Protocol (Stockholm Convention), and negotiations of a global and legally binding agreement on mercury.

The Environmental Emergencies Program managed over 3,900 facilities handling hazardous substances registered under the CEPA 1999 *Environmental Emergencies Regulations*. Approximately 80 percent of these facilities were required to prepare and maintain environmental emergency plans that addressed prevention, preparedness, response and recovery elements of emergency management.

In managing the Federal Contaminated Sites Action Plan (FCSAP), Environment Canada continued to provide program oversight and administration, training, guidance and project review to help federal custodians address contaminated sites for which they are responsible. The Department coordinated and participated in the implementation of the first year of accelerated FCSAP activities under Canada's Economic Action Plan.

Environment Canada continued to track and support the reduction of land-based sources of marine pollution, with a focus on integration with existing departmental policies and programs, in particular those related to freshwater and coastal management. With respect to preventing marine pollution and assessing waste and other matter for disposal at sea, Environment Canada assessed the 81 permit applications received, and issued permits in compliance with the CEPA 1999 requirements. Monitoring of disposal sites was conducted in order to assess the sustainability and compliance of the activities as per CEPA 1999 requirements.

As noted previously in this DPR, the Department successfully completed plans to expand the enforcement program by 50 percent through the hiring, training, and deployment of additional enforcement officers, and through enhancements to laboratory capacity and technical support. Along with the establishment of the strategic enforcement framework (see page 38), this increased capacity will aid the Department in planning and implementing enforcement activities to prevent, detect and deter regulatory non-compliance.

Lessons Learned: In 2009–2010, Environment Canada, jointly with Health Canada, began the evaluation of the Chemicals Management Plan, which will assess issues related to the initiative's relevance and performance from its inception in December 2006 up to October 2010. The preliminary findings will be taken into consideration in the design of the framework for identifying future priorities, and in the design of the risk assessment and management phase that will follow the "Challenge" initiative.

Also in 2009–2010, the audit conducted by the Commissioner of the Environment and Sustainable Development (CESD) concluded that Environment Canada does not have comprehensive risk management strategies for specific substances, namely lead and mercury, and that the Department does not have a formal process for updating assessments and determining the overall effectiveness of risk management strategies. As a result of the audit, work has been undertaken to consolidate risk management strategies for lead and mercury into a comprehensive document. Environment Canada and Health Canada are developing criteria to determine when and how to evaluate risk management strategies in a more systematic manner.

In response to the May 2009 audit conducted by the CESD, which reviewed the Department's administrative provisions of the *Fisheries Act* pollution prevention, Environment Canada will work to develop a risk-based management and accountability framework, conduct reviews of outdated regulations and guidelines, and review risks in unregulated sectors. Environment Canada and Fisheries and Oceans Canada will work together to review the Memorandum of Understanding in order to strengthen clarity in administration and enforcement of the pollution prevention provisions.

In response to the first recommendation of the 2008 report on the Environmental Emergencies Program Evaluation, which was carried out by the Audits and Evaluation Branch, a governance document was completed and approved. This document distinguishes the roles and responsibilities of environmental emergency officers, enforcement officers and compliance promotion officers. The other three recommendations from this evaluation will be addressed through the Environmental Emergencies Program Mandate and Capacity Review. Planning for this Review took place in 2009–2010 and the review itself, including consultation with key stakeholders, will be carried out in 2010–2011.

Environment Canada took steps to address recommendations from the 2008 FCSAP Formative Evaluation in 2009–2010. As a result of the lessons learned from the evaluation, a review and update of program performance measurement indicators and targets were undertaken, a decision-making framework to assist custodians in making decisions to best meet program objectives was implemented, and an operational-level Director General steering committee was established.

Program Activity: Legislation and Information Program					
2009–2010 Financial Resources ($ millions)			2009–2010 Human Resources (full-time equivalents)		
Planned Spending	**Total Authorities**	**Actual Spending**	**Planned**	**Actual**	**Difference**
47.9	53.4	50.1	274	240	(34)
Expected Results	**2009–2010 Performance Status Rating**	**Performance Indicators**	**Targets**	**2009–2010 Performance Summary**	
Facilities releasing pollutants to the environment comply with public reporting requirements	▫ Mostly Met	Percentage of facilities reporting emissions to the National Pollutant Release Inventory (NPRI) that provide fully compliant reports in their initial response within mandated timeframes	100% by 2010	Approximately 9,069 facilities reported to the NPRI for the 2008 reporting year. Of this total, approximately 8,840 facilities (~97.5%) reported prior to the June 1, 2009, reporting deadline and 229 facilities (~2.5%) reported after June 1, 2009.	
Regulations and orders made by Environment Canada under the *Canadian Environmental Protection Act*, 1999 (CEPA 1999) and under the *Fisheries Act* (FA) comply with the Cabinet Directive on Streamlining Regulation, statutory and with other policy requirements.	■ Met All	Percentage of regulations and orders under CEPA 1999 and FA using a quality management system (QMS) for which all stages of the QMS were implemented as required	100% by 2010	During the 2009–2010 fiscal year, a total of 27 regulations and orders under CEPA 1999 and FA were published in the *Canada Gazette*, Part II. Seventeen of them were Orders to add substances to the Domestic Substances List (DSL) that were not required to use the QMS templates. All of the remaining regulations and amendments followed QMS requirements, including development of Records of Decisions.	

The Program Activity description can be found in the Main Estimates online.

Benefits for Canadians: As a result of Environment Canada's work to ensure that facilities releasing pollutants to the environment comply with public reporting requirements, Canadians are provided with easily accessible information to make better-informed decisions on potential risks from pollutants that are released into the

environment. National Pollutant Release Inventory (NPRI) information is used by governments to support the development and monitoring of regulations, policies and programs, enabling Canadians to benefit from reduced exposure to pollutants.

The Department's CEPA 1999 quality management system (QMS) contributes to the prevention and management of risks posed to Canadians by harmful substances, by clarifying internal regulatory processes and decision-making activities within Environment Canada's mandate. Regulatory initiatives that comply with the QMS, which help ensure that the use of the Government's regulatory power results in the greatest net benefit to Canadian society.

Finally, through the provision of departmental expertise and oversight, Environment Canada's environmental technology assessments and expertise help federal technology investments to offer Canadians value for money, optimize environmental benefits, and do not impact negatively on the environment.

Performance Analysis: Approximately 8,840 facilities reported to the 2008 NPRI between April and the June 1, 2009, reporting deadline. An improved online data collection system and centralized help desk assisted facilities in resolving reporting issues in an effective manner. As such, the NPRI Program was successful in meeting Canada's domestic and international obligations for pollution data reporting and publication. In addition, improvements are underway to address the quality of the emissions data reported to the NPRI. For example, the development and publication of improved guidance and emissions estimation tools helped reporters better understand the NPRI reporting requirements and how to estimate pollutant emissions.

In support of the Chemicals Management Plan and other legislative priorities, the QMS continues to offer tools and mechanisms ensuring that decision-making for regulations and other regulatory tools such as codes of practice, pollution prevention plans and performance agreements are more consistent, transparent and predictable, and are compliant with the Cabinet Directive on Streamlining Regulation and with statutory and other policy requirements.

The program's technology assessment function contributed to the synthesis, evaluation and integration of the scientific understanding of the environmental impacts and performance of innovative technologies. The program played a role in overseeing several key programs that advance innovative environmental technologies including Sustainable Development Technology Canada (SDTC), Canada's Environmental Technology Verification (ETV) program, and the Canadian Environmental Technology Advancement Centres (CETACs). Our scientists and engineers provided expert advice, helped establish criteria to guide funding decisions, and evaluated the environmental outcomes of funded projects.

Lessons Learned: Greater integration and cooperation among the various Environment Canada data collection programs would better enable information that is more simplified, streamlined and aligned with departmental priorities. Lessons learned from the design

and implementation of electronic submission tools to support data gathering under the Chemicals Management Plan, the National Pollutant Release Inventory and the Greenhouse Gas Emissions Reporting Program were integrated in the Single Window Reporting Initiative. More specifically, the lessons learned included the importance of the coordination and communication of clear and valid business rules, tools to manage data, and the involvement of information management specialists and key program staff to promote alignment of data requirements across programs while ensuring that reporting obligations can be met in response to provisions under CEPA 1999.

Program Activity: Clean Air Program					
2009–2010 Financial Resources ($ millions)			**2009–2010 Human Resources (full-time equivalents)**		
Planned Spending	**Total Authorities**	**Actual Spending**	**Planned**	**Actual**	**Difference**
138.1	138.0	109.5	598	502	(96)
Expected Results	**2009–2010 Performance Status Rating**	**Performance Indicators**	**Targets**	**2009–2010 Performance Summary**	
Risks to Canadians, their health and their environment from air pollutants and greenhouse gas emissions are reduced	☐ Mostly Met	Canadian industrial emissions of greenhouse gases (carbon dioxide equivalents) in megatonnes (MT)	Total national industrial emissions of 240 MT by 2020 based on current estimates[40]	Canadian industrial emissions of greenhouse gases (carbon dioxide equivalents) in 2008 were 327 MT. Progress was made to advance the development of approaches to reduce greenhouse gas (GHG) emissions from industrial sectors to meet the national reduction target in the context of a potential North American cap-and-trade system, including a draft set of rules and guidance for Canada's Offset System published in June 2009.	
		Canadian industrial emissions of course particulate matter (PM_{10}), sulphur dioxide (SO_2), nitrogen oxides (NO_x), volatile organic	Targets will be determined with the finalization of the air pollutant regulatory framework.	Canadian industrial emissions of PM_{10}: 206,741 tonnes; SO_x: 1,751,593 tonnes; NO_x: 973,938 tonnes; VOC: 821,933 tonnes; and Hg: 5093.8 kg.[41] A *Comprehensive Air Management System (CAMS) – A Proposed*	

[40] This is no longer the current target. The Government of Canada announced an economy-wide mid-term commitment to reduce GHG emissions by 17 percent, relative to 2005 levels, by 2020. http://www.climatechange.gc.ca/cdp-cop/default.asp?lang=En&n=C4B1D2547-1#p3

[41] Figures are 2007 levels.

		compounds (VOCs) and mercury (Hg)		*Framework to Improve Air Quality Management* was developed through joint work with provinces, industry and non-governmental organizations. It includes a foundation of industrial emission requirements for sources of SO_2; NO_x, VOC and particulate matter.
		Canadian transportation emissions of: particulate matter 10 (PM10), nitrogen oxides (NOx), volatile organic compounds (VOCs), and carbon monoxide (CO)	Targets will be determined with the finalization of the air pollutant regulatory framework.	Canadian Transportation emissions of PM_{10}: 72,001 tonnes; SO_x: 101,529 tonnes; NO_x: 1,209,463 tonnes; VOC: 553,828 tonnes and CO: 6,852,157 tonnes [42] Canada has developed and will continue to develop regulations to reduce air pollutant emission from vehicles and engines in alignment with the world leading national standards of the U.S. Environmental Protection Agency. There are currently regulations to control air pollutant emissions from new cars and trucks, motorcycles and buses and for off-road diesel engines. A draft of Renewable Fuels regulations was released for consultation to industry.

The Program Activity description can be found in the Main Estimates online.

Benefits for Canadians: Environment Canada continued to develop an approach to reduce air pollutant and greenhouse gas emissions, raise awareness, and promote activities and develop instruments to reduce emissions and pollutants from industrial and transportation sectors. The overall objective and benefit of these activities is to improve air quality and reduce greenhouse gas emissions to minimize the harmful effects of air pollution and climate change on Canadians and the environment.

Environment Canada's science and research supported the development of regulations, guidelines and policies to protect the health of Canadians and their environment, as well as contributing to our international obligations. Tracking the amount of emissions is important to understand both how air, water and land are changing, and the potential

[42] Figures are 2007 levels.

impacts on health and the environment. Environment Canada, working with its partners in government and industry, collects measurements of air quality across Canada. This information helps to determine the sources of air pollution in Canada, and how this pollution affects air quality.

Performance Analysis: Progress was made in advancing approaches to reduce greenhouse gas emissions from industrial sectors in the context of a potential North American cap-and-trade system, including a draft set of rules and guidance for Canada's Offset System published in June 2009. As part of this effort, a single window reporting system was developed and launched to gather data for reporting GHG emissions. Furthermore, Canada's Kyoto Protocol National Registry, which connects directly to the International Transaction Log (ITL) operated by the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat, was launched in March 2010.

Environment Canada worked intensively with other federal departments, provinces, industry, and NGOs to develop a proposed framework for a comprehensive air management system that includes industrial air pollution emissions requirements, ambient air quality standards, and a focus on regional air quality management of all sources of air pollution.

Environment Canada, with Natural Resources Canada, completed studies to assess and characterize emissions from diesel engines using various diesel fuels and engine modes. In addition, the Department has developed and will continue to develop regulations to reduce air pollutant emission from vehicles and engines in alignment with the world-leading national standards of the U.S. Environmental Protection Agency. The Department was developing greenhouse gas emissions regulations for new cars and light trucks for the 2011 and later model years. Draft Renewable Fuel Regulations that require minimum renewable fuel content in gasoline and diesel were released for consultation. The National Vehicle Scrappage Program retired more than 64,000 older, higher-polluting vehicles, reducing smog-forming emissions by 2,600 tonnes.

The Department continued to undertake research and monitoring on air quality to support emission reduction strategies, to enhance consistency and comparability of particulate matter ($PM_{2.5}$) data, and to upgrade air quality models to improve the prediction of air pollution. This research included the development of a new air quality forecast model GEM-MACH (Global Environmental Multiscale model - Modelling Air quality and Chemistry). Work continued on determining national pollutant levels for smog, acid deposition and their precursors as well as for mercury. Environment Canada's observatory in Alert, Nunavut continued to provide new information on Canada's rapidly changing climate, atmospheric long-range transport of pollutants and ecosystem impacts to Canadians and international partners.

Through the Canada-United States Clean Energy Dialogue, the Department worked closely with the United States to coordinate action on air pollutants, climate change and clean energy technology research, development and deployment. Further discussions on a Particulate Matter (PM) Annex to the Canada-U.S. Air Quality Agreement will be held

once both countries have refined their domestic regulatory approaches to managing PM emissions.

In March 2010, the International Maritime Organization decided to adopt the North American Emission Control Area proposed by Canada, the U.S. and France. The Emission Control Area will reduce air pollution from shipping in designated waters off North American coasts.

Environment Canada also continued to support enhanced global cooperative action to address emissions of hydrofluorocarbons (HFCs) through targeted actions under the Montreal Protocol, and committed to work with the U.S. and Mexico to promote the phase down of HFCs, under the Protocol. New regulations for Volatile Organic Compounds (VOC's) were published in the *Canada Gazette*, Part II, and another regulation is expected in late 2010.

Intensive negotiations at the 2009 United Nations Climate Conference culminated in the Copenhagen Accord. Canada formally associated itself with the Accord and submitted in January 2010 an economy-wide emissions target for 2020 of 17 percent below 2005 levels, which is aligned with the U.S. target. Canada is continuing to pursue a harmonized approach with the U.S., and to engage in the UN process to negotiate a comprehensive post-2012 agreement based on the Copenhagen Accord. Canada's engagement in the UN process was complemented by participation in the G-8/G-20, the Major Economies Forum and international clean technology partnerships such as the Asia Pacific Partnership on Clean Development and Climate (APP). Twenty-eight Canadian APP projects received a total commitments totalling over $11 million in 2009, leveraging $77 million in private sector investment. These projects, including the design of green buildings, research in solar and wind power, and the recovery of landfill gas, demonstrated Canada's commitment to help accelerate the development and deployment of clean technologies as part of the global effort to address climate change.

Lessons Learned: A key lesson learned is the importance of maintaining both ongoing horizontal coordination, within and across departments and other jurisdictions, and the necessary flexibility to direct resources and develop regulations for air pollutants and GHG emissions to respond to changing priorities and circumstances. The collaborative process for developing the proposed air pollutant framework was valuable and will facilitate the eventual implementation of the regulatory approach for air pollutant emissions.

Strategic Outcome 4: Canadians benefit from the responsible development of the Mackenzie gas resources

Description: The Mackenzie Gas Project (MGP) is a proposed $16.2 billion investment in the Northwest Territories (NWT) to develop three "anchor" gas fields, a gas gathering and processing system and a 1,200-kilometre pipeline from Inuvik to the Alberta-NWT border. The pipeline would connect otherwise stranded gas resources in the Mackenzie Delta and Beaufort Sea to markets in the rest of North America. The Government of Canada's involvement in the project arises from its ownership of petroleum resources in the NWT, responsibility for the regulatory framework in the territory and fiduciary relationship to the Aboriginal groups that will be impacted, if the project proceeds.

Environment Canada has contributed to the Government of Canada's process to support the MGP within the scope of the Department's mandate as described in the statutes and regulations that it administers and the policies, agreements and programs for which it is responsible. The Department focuses on its responsibilities under legislation, key national policies (climate change, pollution prevention, biodiversity conservation, emergency preparedness, sustainable development) and other national and international environmental considerations (precautionary principle, conservation of Arctic fauna and flora, Arctic contaminants, regional approaches to cumulative effects management, adaptive management). As a major science department in the federal government, Environment Canada carried out research and monitoring on atmospheric, biological and hydrographic sciences in areas that may potentially be impacted by the proposed project.

Environment Canada's work under the Strategic Outcome is organized into a single Program Activity:

- Mackenzie Gas Project

The following pages contain further performance information about the work that is undertaken to deliver this Program Activity.

Program Activity: Mackenzie Gas Project					
2009–2010 Financial Resources ($ millions)			**2009–2010 Human Resources (Full-time Equivalents)**		
Planned Spending	**Total Authorities**	**Actual Spending**	**Planned**	**Actual**	**Difference**
0	9.7	6.5	0	17	17

Program Activity Summary: This program supports the activities of the Mackenzie Gas Project Office (MGPO) which is responsible for facilitating the legal, operational and regulatory coordination of federal government input to the Mackenzie Gas Project (MGP). The purpose of the Project is to construct a 1,200 kilometre pipeline through the

Northwest Territories and Alberta to connect gas resources in Canada's North to markets in North America.

Key activities under this program include coordinating federal government input to the Joint Review Panel (JRP), a seven-member, independent body responsible for evaluating potential impacts on the environment and the lives of people in the project area; leading federal government interaction and supporting consultations with the project proponents, Aboriginal groups and the governments of the Northwest Territories and Alberta; preparing a Government of Canada response to the December 2009 report from the JRP; facilitating the National Energy Board regulatory process for a timely and accountable regulatory regime for the MGP; developing a fiscal framework to assess areas where the federal government may participate in the MGP; and implementing the *Mackenzie Gas Project Impacts Act*, specifically administering up to $500 million to support mitigation strategies related to the socio-economic impacts of the Mackenzie Gas Project.

Other federal legislation relevant to this program includes the *Canadian Environmental Assessment Act* (CEAA); the *Mackenzie Valley Resource Management Act* (MVRMA); and the *Western Arctic (Inuvialuit) Claims Settlement Act* and other similar acts and agreements with Aboriginal governments.

Benefits for Canadians: In 2009–2010, Environment Canada played a central role in Government activities to complete the environmental assessment of the MGP in a timely, efficient and effective manner. The Department participated in the completion of the project management plan for its response to the Joint Review Panel report, as well as in the completion of a draft of the Government's response, including development of preliminary response statements and proposed Aboriginal consultation considerations. As a Responsible Authority under the CEAA and the MVRMA, the Department responded to regulatory and legislative obligations related to the MGP and began preparations for the regulatory phase of project. As well, in conjunction with other Responsible Authorities, the Department initiated development of monitoring and follow-up plans, pursuant to section 38 of the CEAA.

The MGPO implemented the Regional Executive Committee, composed of federal, territorial and northern regulators, responsible for regional decision making to ensure timely resolution of regulatory issues surrounding the MGP. The MGPO also developed a process, in consultation with the Senior Review Sub-Committee (SRSC), to enable the Government to respond to the Joint Review Panel report in a timely fashion. As well, the MGPO led the development of a consultation plan with the Consultation Working Group to enable the Government to undertake consultations with Aboriginal groups, if required, pursuant to the release of the JRP report.

Performance Analysis: Key activities undertaken on the MGP in 2009–2010 included: significant preparatory work in advance of the Joint Review Panel (JRP) report which was received in December 2009; ongoing consultation with affected Aboriginal groups along the proposed pipeline corridor; the continued development and implementation of a regulatory plan to coordinate federal efforts to efficiently respond to approximately 7,000

MGP project activities; projects to gather data to inform decision making; ongoing liaison with MGP stakeholders; and, efforts related to the negotiation of a fiscal support package for the project. Environment Canada, both through its program responsibilities and its responsibility for the MGPO, played a central role in all of these activities.
Owing to delays in the assessment process undertaken by the Joint Review Panel, the MGP has proceeded more slowly than expected. As such, the project did not enter the regulatory review phase.

Lessons Learned: Through its responsibility for the MGPO, the Department played a role in 2009-10 in ensuring the Government was prepared to respond effectively and efficiently to the JRP report. Funding was secured via Budget 2010 so that the Government's response can be delivered as expected in 2010. The MGPO's role is one of facilitation, and responds to and supports the level of commitment expressed by the private sector proponents of the MGP.

Note: When performance measurement information for the MGP was sought, it was anticipated that by 2009–2010, the environmental phase of the project would be concluded and that it would be proceeding to the regulatory phase. Due to the delay in the release of the JRP report, the environmental phase is not yet complete. Once the environmental phase of the project is complete, the private-sector proponents of the project will make a decision regarding whether to proceed to the regulatory phase of the project. Should the proponents indicate in 2010–2011 that they are prepared to accelerate their project work and proceed to the regulatory phase, federal activity in support of the project could be re-evaluated. Performance measurement information for the MGP is not included in Environment Canada's 2009–2010 Report on Plans and Priorities. Though project responsibility was transferred from Industry Canada to Environment Canada in late 2008, the integration of the project into Environment Canada was not fully realized until April 1, 2009, too late to be included in the 2009–2010 Report on Plans and Priorities.

Internal Services

Program Activity: Internal services					
2009–2010 Financial Resources ($ millions)			2009–2010 Human Resources (full-time equivalents)		
Planned Spending	Total Authorities	Actual Spending	Planned	Actual	Difference
282.9	354.7	351.3	1,938	2,065	127

The Program Activity description can be found in the Main Estimates online.[43]

This Program Activity is supported by an Internal Service (IS) Board consisting of representatives from across the Department, including: Management and Oversight Services (Strategic Policy, Science and Technology Policy, Corporate Services, Internal Audit Services, Evaluation Services, Values and Ethics); Communications; Legal Services, Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Travel and Other Administrative Services; Real Property; Materiel; Acquisitions; as well as from the regions.

Performance Analysis:

The Internal Services **policy priorities** 2009–2010 supported the policy agenda of Environment Canada and the Government of Canada, while **management priorities** enabled programs to pursue Environment Canada's mandate to meet the stewardship and performance requirements of the Management, Resources and Results Structure Policy, the Management Accountability Framework and specific program priorities.

Performance in support of Policy Priorities in 2009–2010:

Policy analysis and coordination capacity supported efforts to develop policy options pertaining to identified government priorities, including climate change and clean air, clean water, and conservation and biodiversity. In 2009–2010, specific contributions included support for activities associated with the Copenhagen Accord, the U.S.-Canada Clean Energy Dialogue, negotiations to amend the Great Lakes Water Quality Agreement and the Canadian Council of Ministers of the Environment Strategic Directions for Water.

The Department also developed the International Engagement Framework to guide its participation in key institutions such as the United Nations Environment Programme, the Organisation for Economic Co-operation and Development, the Global Environment

[43] http://www.tbs-sct.gc.ca/est-pre/20092010/me-bd/EC-eng.asp#bm01, or page 8-4 in the 2009–2010 Main Estimates document.

Facility, and the North American Commission for Environmental Cooperation. Environment Canada continued extensive bilateral engagement with the U.S. Opportunities for cooperation were also initiated or continued with trade partners Chile, Peru, India, and the European Union. The Department also launched an International Affairs website to better inform Canadians on its international engagement activities.

Environment Canada is leading the implementation of the *Federal Sustainable Development Act*. Work is under way on a management framework for the implementation of the *Act,* and a logic model and performance measurement framework is expected shortly. With respect to the Federal Sustainable Development Strategy, on March 15, a consultation draft was released for the legally mandated 120-day comment and review period. The multi-stakeholder Sustainable Development Advisory Council required by law has been established. The final strategy will be tabled in autumn 2010.

Across Canada, Environment Canada engaged with other jurisdictions, Aboriginal peoples and external stakeholders to advance the Government of Canada's environmental agenda. In 2009–2010, a consultation policy was developed to facilitate effective consultation processes with all stakeholders and meet responsibilities to consult with Aboriginal peoples. As well, a new public website was launched in March 2010 informing Canadians of opportunities to participate in consultation activities. Engagement also included working with provincial and territorial partners through the Canadian Council of Ministers of the Environment and the Canadian Council of Resource Ministers to advance cross-jurisdictional environmental issues, such as municipal wastewater, air emissions and biodiversity.

The Department enhanced its capacity to communicate environmental information through the development of a Corporate Communication Strategy and Communication Management Framework. These strategic tools clarified messaging, particularly with respect to economy and environment linkages, as was evidenced through a revamped Internet presence, social media strategy, as well as speeches, news releases and hundreds of publications and a coordinated exhibit presence across Canada.

Performance in support of Management Priorities in 2009–2010:

The development of revised Strategic Outcomes and a new Program Activity Architecture (PAA) was completed by the Department and approved in May 2009. Coming into effect at the beginning of fiscal year 2010–2011, the revised PAA, along with a full Performance Measurement Framework (PMF), will allow the Department to better explain its programs, expected results and performance to Canadians and Parliamentarians.

Environment Canada focused on improving the way managers plan their staffing activities and introduced innovations in the way in which staffing and recruitment are conducted in order to stabilize the organization and meet the Department's business needs. The newly developed Term Employment Policy, Staffing Service Standards and Staffing Planning Tool will assist managers in taking a more strategic approach to staffing.

From June 2009 to March 2010, the representation of each of the four designated groups within Environment Canada's workforce (women, Aboriginal peoples, persons with disabilities, and visible minorities) has improved significantly. While visible minorities remain under-represented, the gap has decreased at the departmental level from -127 to -67 during this period.

Recruitment and staffing plans were put in place to address succession issues at the EX level. A corporate knowledge transfer initiative was also launched, serving not only to capture key knowledge, but also to build and strengthen the Department's science and policy capacity. Environment Canada ensures, at a minimum, that the equivalent of 1.5 percent of the salary budget is spent on training-related activities. In 2009–2010 the Department spent an additional 12 percent (i.e., for a total of 1.68 percent of salary budget) over this minimum on training-related activities.

Environment Canada produced a comprehensive analysis of the 2008 Public Service Employee Survey (PSES) results at the departmental and branch levels. Consultations held with bargaining agents, employees and senior managers to validate findings resulted in the identification of three departmental priorities:

- Leadership and Direction
- Learning and Development
- Streamlining Business Practices

Actions are currently under way to address these priorities, including the development of learning events through the Environment Canada Managers Network, update of service standards for HR functions, including classification and compensation, launch of a new Performance Management regime for all employees, and development of branch Employee Engagement Strategies.

The Department made progress in 2009–2010 on Internal Control over Financial Reporting (ICFR), establishing the organizational infrastructure, program governance and initiation of several projects. Environment Canada's system of internal controls was strengthened with the objective of achieving financial statement audit readiness by the set date of 2013–2014. Key accomplishments include the documentation of existing entity, transactional and information technology (IT) controls. Testing of design effectiveness for these controls and key business processes was also completed. Many control deficiencies were addressed and a number of financial business process improvements were implemented in 2009–2010.

With respect to the provision of management information regarding finances made during 2009–2010, the Department now provides, in electronic format, a standard, single source presentation of the departmental financial position at specific points in time. The Management Variance Report, implemented across the Department in 2009, provides all managers with a snapshot of their financial situation and is generally updated weekly. It

is also the single source of financial data for internal departmental reporting and has resulted in greater accuracy, timeliness and consistency in financial reporting.

Implementation of Environment Canada's three-year Information Management and Information Technology (IM & IT) Plan (i.e. the 2009-12 IM & IT Plan) continued, along with enhancement of client engagement to align funding, design process and delivery of IM and IT services and projects to the Department's Strategic Outcomes.

The IM/IT Portfolio / Client Relationship Management program has matured since its initial implementation in 2008, and continues to enhance client engagement and alignment between departmental and program objectives and delivery of IM and IT products and services. Environment Canada has complementary mechanisms to ensure that both the funding and the design process align IM & IT projects with departmental and program objectives.

Environment Canada's IM & IT Services advanced in the areas of process standardization and the use of best practices. In addition, processes and procedures are in place for Incident Management, Problem Management, Service Level Management and Financial Management.

The first multi-year departmental Capital Investment Plan was completed. This plan ensures that high priority items are funded and focuses on funding life-cycle management requirements.

Environment Canada has made significant progress promoting effective life-cycle management and Government of Canada "greening government" objectives, including the consideration of energy efficiency as a selection parameter in the end-of-life replacement process. The focus in 2009–2010 was on server virtualization and printer consolidation projects, as well as developing processes and testing the computer systems that will lead to a completely revised Materiel Management Framework and the implementation of a true life-cycle management process and procedures for asset management.

The focus on real property assets in 2009–2010 was the completion of 17 site-specific integrated investment plans, based on facility condition and associated life-cycle management requirements. These plans are used to inform life-cycle investment decisions and minimize risk within the real property asset portfolio.

Environment Canada's Audit and Evaluation Branch improved the effectiveness and efficiency of departmental policies, programs and management through the completion of 8 internal audit reports, 17 evaluation projects (5 plans and 12 evaluations [presented in 9 reports]), and consultation and liaison services provided on 10 external audit reports conducted by the Office of the Auditor General and the Commissioner of the Environment and Sustainable Development.

The External Audit Advisory Committee and the Departmental Evaluation Committee provided oversight to the internal audit and evaluation functions and advice and support to the Deputy Minister.

Canada's Economic Action Plan Initiatives[44]

Announced in Budget 2009, Canada's Economic Action Plan (CEAP) provided funding to Environment Canada over two fiscal years. In 2009–2010, the Department spent $18.44 million, or 76 percent, of the total funding received ($24.32 million) for the following five distinct initiatives:

- **Modernizing Federal Laboratories:**

  2009–2010 Total Authorities - $6.4 million
  2009–2010 Total Actual Expenditure - $4.425 million

  The Modernizing Federal Laboratories initiative provided Environment Canada with $13.7 million over two years ($6.4 million in 2009–2010) to address deferred maintenance at four laboratories located at: the Canada Centre for Inland Waters (CCIW) in Burlington, Ontario; the National Wildlife Research Centre (NWRC) in Ottawa, Ontario; the Environmental Science and Technology Centre (ESTC) in Ottawa, Ontario; and, the Global Atmosphere Watch (GAW) Observatory in Alert, Nunavut. Environment Canada's six projects in these four laboratories are in keeping with the objectives of the CEAP and are aimed at providing economic stimulus in the construction, architectural and engineering sectors, as well as helping maintain and further the excellence of Environment Canada's world-class scientific activities.

  Environment Canada has met all of the objectives as the planned project activities for the current fiscal year were delivered on time and below the initial budget allocation. The work included the replacement of outdated infrastructure, upgrades to existing laboratories and facilities, and the fit-up of unproductive space to meet increased program demand for analytical and research capacity. All six multi-year projects are well underway and are expected to be completed by March 31, 2011.

- **Accelerating Federal Contaminated Sites Action Plan:**

  2009–2010 Total Authorities - $2.2 million
  2009–2010 Total Actual Expenditure - $2.052 million

  This CEAP initiative provides custodians of federal contaminated sites (including Environment Canada) with additional funding to accelerate assessment of whether human health and ecological risks exist and any remediation activities are needed to manage these risks. Environment Canada houses the Secretariat and provides expert support to other government departments and consolidated Crown corporations, and manages sites for which it has responsibility.

[44] CEAP figures exclude contributions to Employee Benefits Plans (EBP).

In 2009–2010, funding received ($2.2 million in 2009–2010) was used to complete 40 assessment and 4 remediation projects across the country, including nine provinces and two territories. Environment Canada has met all of the expected results as these projects were delivered on time and within budget.

- **Canada's Environmental Sustainability Indicators (CESI) Initiative**

  2009–2010 Total Authorities - $5.680 million
  2009–2010 Total Actual Expenditure - $5.203 million

  The CEAP funding allowed Environment Canada to sustain the Government's reporting on environmental indicators, by supporting the production of indicators for clean air, clean water, greenhouse gases and nature, and by making improvements to the information available on its website. This work fulfills statutory obligations under several Acts and provides better information for policy and regulatory decision-making.

  The CESI website has the most recent indicator results for clean air, clean water, and greenhouse gas emissions. Improvements to the Web content and site include: improved national representation of the water quality indicator; a new indicator on Protected Areas to initiate coverage for the "protecting nature" theme proposed under the Federal Sustainability Development Strategy (FSDS); and improvements to the mapping application, which provides searchable local level information for each indicator. An engagement strategy was developed and implemented. It includes newsletters and stakeholder meetings aimed at promoting understanding and use of the indicators.

- **Promoting Energy Development in Canada's North:**

  2009–2010 Total Authorities - $9.7 million
  2009–2010 Total Actual Expenditure - $6.5 million

  The CEAP funding allocated to Environment Canada supports the Mackenzie Gas Project Office (MGPO) within Environment Canada. The Department developed a project management plan that provided details regarding the steps that would be undertaken by the Government of Canada in order to respond to the Joint Review Panel (JRP) report (released in December 2009). Moreover, the Department had started coordinating the Government's response to the report. The funding also enabled the Department to support its obligations related to the federal government's responsibilities in this project and to complete science and environmental monitoring projects necessary to establish baseline data to support the Department's regulatory position. The finalization of a regulatory implementation plan would be used by federal, territorial and northern regulators with responsibility for issuing nearly 7,000 permits and authorizations associated with the MGP. Lastly, the funding also helped the development of a consultation plan amongst federal departments that would

enable the Government to undertake consultations with Aboriginal communities, as required, in order to complete the Government's response to the JRP report.

- **Arctic Research Infrastructure:**

  2009–2010 Total Authorities - $.34 million
  2009–2010 Total Actual Expenditure - $.26 million

Funding was provided mainly to support the development and expansion of Arctic research field camp facilities. More specifically, about 25 percent of the funding in 2009–2010 went to purchasing prefab buildings or supplies for construction of new field labs, with additional spending for installation of plumbing and electrical systems. Additional investments in green technologies were made, including composting toilets and solar power systems. About $30,000 was also spent on the transportation of goods from where they were purchased to the field sites. These investments helped provide a near-term economic stimulus while strengthening the foundation for Environment Canada's Arctic research capacity, thus providing a platform to help improve our understanding of the northern environment and allow monitoring of climate change.

Section III: Supplementary Information

Financial Highlights

The financial highlights presented on the following pages offer an overview of Environment Canada's financial position and operations. The detailed unaudited departmental financial statements can be found on Environment Canada's website.

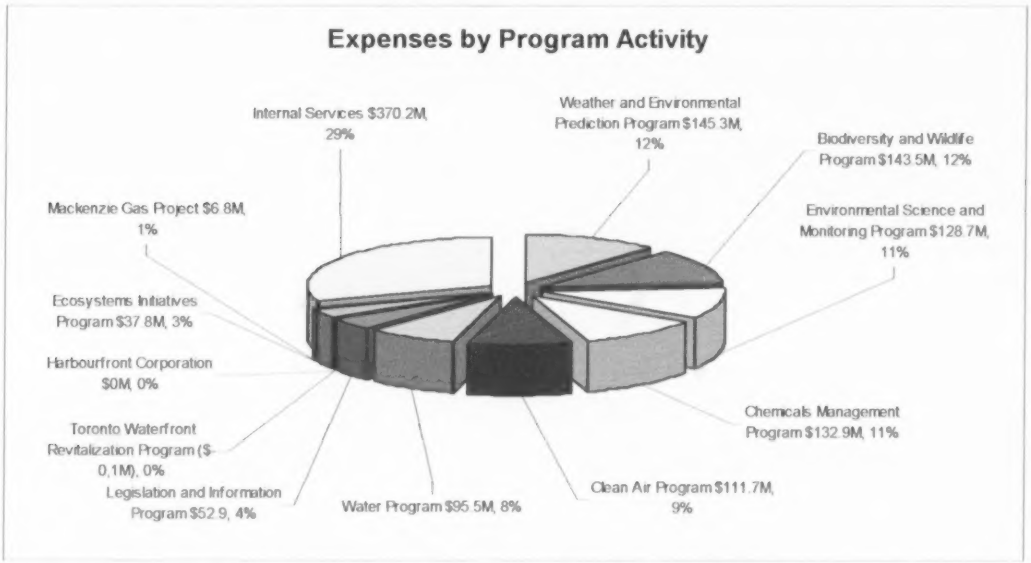
Environment Canada's unaudited financial statements are prepared in accordance with accrual accounting principles and, therefore, are different from appropriation-based reporting, which is reflected in Sections I and II of this report. Sections I and II are prepared on a modified cash basis, and not an accrual basis. A reconciliation between Parliamentary Appropriations used (*modified cash basis*) and the Net Cost of Operations (*accrual basis*) is set out in Notes 2 and 3 of Environment Canada's unaudited financial statement at http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1

Condensed Statement of Operations At End of Year (March 31, 2010) (000s)	**% Change**	**2010**	**2009**
EXPENSES			
Total Expenses	-1.0	1,225,291	1,237,755
REVENUES			
Total Revenues	7.6%	(87,425)	(81,239)
NET COST OF OPERATIONS	**-1.6%**	**1,137,866**	**1,156,516**

Condensed Statement of Financial Positions At End of Year (March 31, 2010) (000s)	**% Change**	**2010**	**2009**
ASSETS			
Total Assets	-1.4%	625,225	634,018
TOTAL	**-1.4%**	**625,225**	**634,018**
LIABILITIES			
Total Liabilities	-2.0%	493,639	503,719
EQUITY			
Total Equity of Canada	1.0%	131,586	130,299
TOTAL	**-1.4%**	**625,225**	**634,018**

A change in Treasury Board accounting policy for 2009–2010 requires the presentation of amounts due from the Consolidated Revenue Fund as an asset in the Statement of Financial Position. The amounts for Assets and Equity of Canada for 2008–2009 have been re-stated to reflect this change and allow for appropriate comparison with the previous year.

Total departmental expenses by Program Activity have decreased by $13 million or 1 percent, from $1,238 million in 2008–2009 to $1,225 million in the current year. The major elements contributing to this overall decrease are Transfer Payments, with a $82.6 million decrease offset by a $33.7 million increase in salary expenses and a $30.7 million increase in Environmental Liabilities. In addition, the 2009–2010 variances can also be explained in part by the fact that the Internal Services were not re-allocated to the programs but are reported on their own, as required by the Receiver General for Canada.

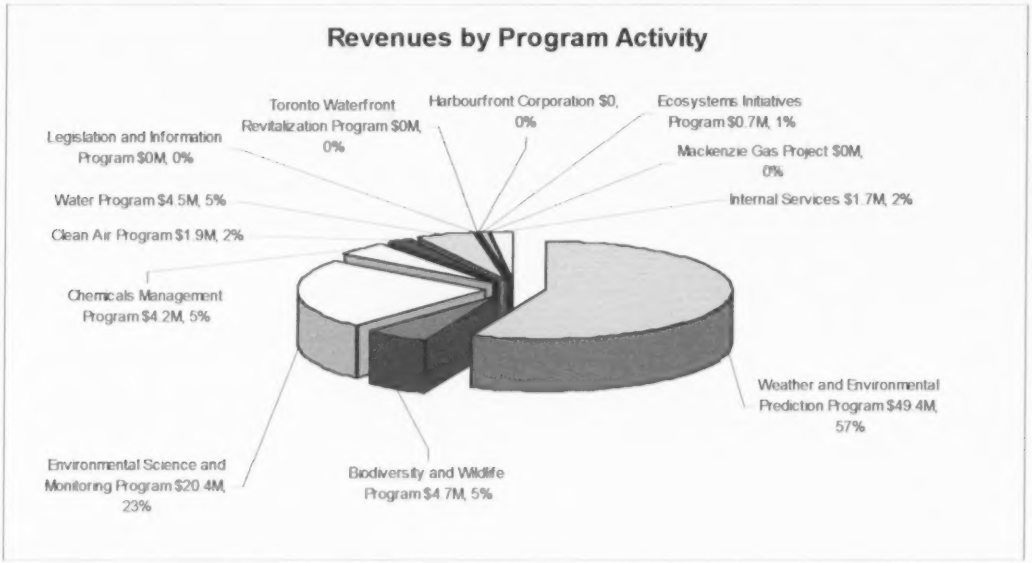

Expenses by Program Activity
Internal Services $370.2M, 29%
Weather and Environmental Prediction Program $145.3M, 12%
Biodiversity and Wildlife Program $143.5M, 12%
Mackenzie Gas Project $6.8M, 1%
Environmental Science and Monitoring Program $128.7M, 11%
Ecosystems Initiatives Program $37.8M, 3%
Harbourfront Corporation $0M, 0%
Chemicals Management Program $132.9M, 11%
Toronto Waterfront Revitalization Program ($-0.1M), 0%
Legislation and Information Program $52.9, 4%
Water Program $95.5M, 8%
Clean Air Program $111.7M, 9%

See note 13 – Segmented information to the departmental financial statements at http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1.

*The $6.8 million for the Mackenzie Gas Project reflects both Mackenzie Gas Project Office and Program spending.

Total revenues amounted to $87.4 million for 2009–2010. The majority of the revenue was derived from Environment Canada's activities under the "Weather and Environmental Prediction Program".'

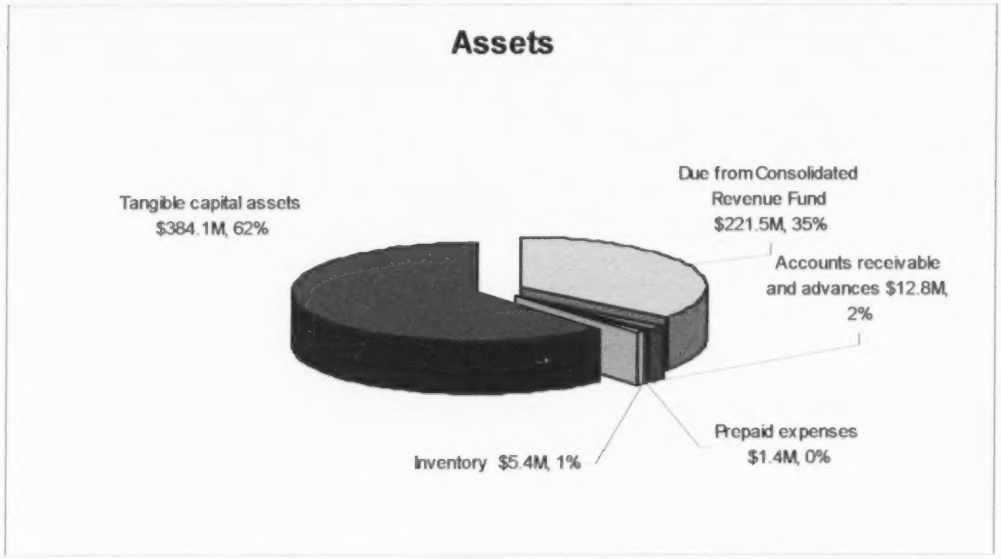
Other revenue items include ocean disposal permit applications, meteorological services, hydraulics laboratory, and ocean disposal monitoring fees. Environment Canada has had a significant increase in revenues in 2009–2010 ($6.2 million).


Revenues by Program Activity
Toronto Waterfront Revitalization Program $0M, 0%
Harbourfront Corporation $0, 0%
Ecosystems Initiatives Program $0.7M, 1%
Legislation and Information Program $0M, 0%
Mackenzie Gas Project $0M, 0%
Water Program $4.5M, 5%
Internal Services $1.7M, 2%
Clean Air Program $1.9M, 2%
Chemicals Management Program $4.2M, 5%
Weather and Environmental Prediction Program $49.4M, 57%
Environmental Science and Monitoring Program $20.4M, 23%
Biodiversity and Wildlife Program $4.7M, 5%

See note 13 – Segmented information to the departmental financial statements http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1.

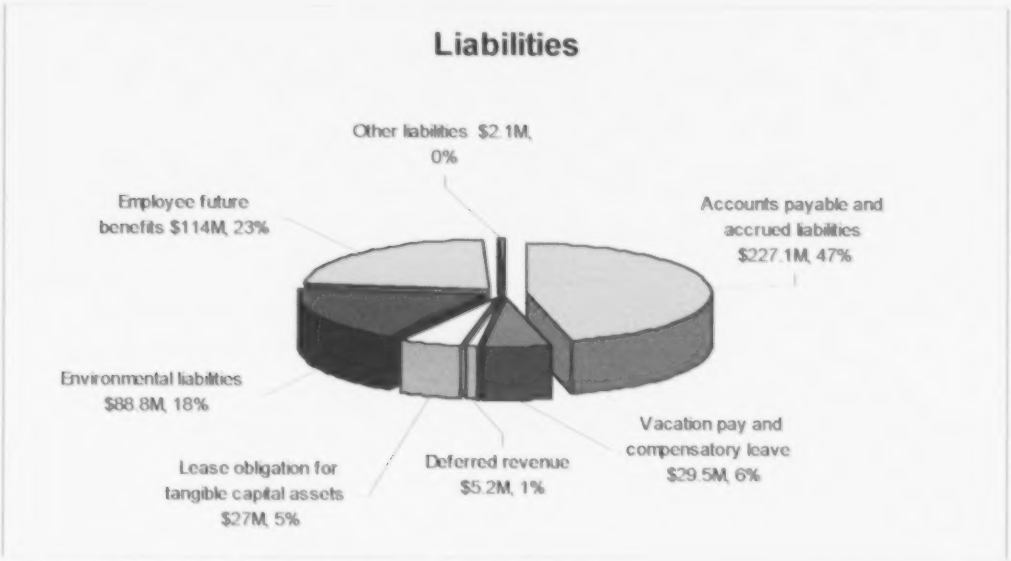
Total assets, valued at $625 million, have decreased by $8.8 million. This decrease in Environment Canada's total asset valuation is mainly attributable to a decrease in amounts due from the Consolidated Revenue Fund with a decrease of $37.8 million (from $259.3 million in 2008–2009 to $221.5 million in 2009–2010) offset by an increase in tangible capital assets of $26.9 million (from $357.2 million in 2008–2009 to $384.1 million in 2009–2010).

This increase in Tangible Capital Assets is the result of classifying and recording the supercomputer lease agreement as a capital lease ($13 million additional net book value), in combination with a net increase of $21 million attributable to Assets under Construction that were put into service. Both of these increases are offset by a net decrease of $7 million (net value book) across all other capital assets categories.



See notes 4 and 5 – Accounts receivable and advances; Tangible Capital Assets to the departmental financial statements at http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1.

Total liabilities were $493.6 million at the end of 2009–2010. This represents a decrease of $10 million (2 percent) from the previous year's total liabilities of $503.7 million. The Accounts Payable and Accrued Liabilities continue to represent the largest component of liabilities at $227.1 million or 47 percent of total liabilities, showing a decrease of 15 percent from the previous year mainly due to a decrease of $29.3 million related to a liability with Nature Conservancy of Canada. Lease obligations for tangible capital assets increased by $12.5 million. This is mainly due to the conversion of the lease for the super computer now being recorded as a capital lease where previously it was reported as an operating lease.


Liabilities
Other liabilities $2.1M, 0%
Employee future benefits $114M, 23%
Accounts payable and accrued liabilities $227.1M, 47%
Environmental liabilities $88.8M, 18%
Vacation pay and compensatory leave $29.5M, 6%
Lease obligation for tangible capital assets $27M, 5%
Deferred revenue $5.2M, 1%

See notes 6 to 11 – to the departmental financial statements at http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1.

Supplementary Information Tables

All electronic supplementary information tables found in the 2009–2010 Departmental Performance Report can be found on the Treasury Board of Canada Secretariat's website at www.tbs-sct.gc.ca/dpr-rmr/2009-2010/index-eng.asp.

- Details on Transfer Payment Programs
- Up-Front Multi-Year Funding
- Green Procurement
- Horizontal Initiatives
- Response to Parliamentary Committees and External Audits
- Internal Audits and Evaluations
- Sources of Respendable and Non-Respendable Revenue
- User Fees and External Fees
- Status Report on Projects Operating with Specific Treasury Board Approval

Other Items of Interest

The following information is part of Environment Canada's Supplementary Information to the 2009–2010 Departmental Performance Report (DPR). Official Languages, Management Accountability Framework and Indicators of Environmental Sustainability are introduced as *Other Items of Interest*.

Official Languages

Under the *Official Languages Act (OLA)*, Environment Canada's (EC) obligations include providing bilingual services to the public and ensuring that the language of work provisions are respected at all times.

Environment Canada is committed to ensuring that members of the public can exercise their right to communicate with the Department and obtain services in the official language (OL) of their choice. To this effect, Environment Canada has revised and communicated the guidelines on the provision of bilingual service and active offer via the Intranet. Reminders on OL obligations related to service to the public and active offer were also sent to managers and employees across the country. Furthermore, to measure Environment Canada's compliance with Part IV of the OLA, a monitoring strategy to assess the Department's efficiency in providing bilingual service and active offer to the public was developed in 2009–2010. The results of this assessment, conducted twice a year, will be reported back to Branch Heads for the implementation of corrective measures. With respect to language of work, the new internal Guidelines on Language of Work will be communicated in 2010–2011. A monitoring strategy will also be developed to assess the Department's capacity to create and maintain a work environment that is conducive to the use of both official languages for its employees. Furthermore, the progress of all employees who require language training to meet the language requirements of their position and their access to and completion of such training within

the timeframe prescribed by the *Public Service Official Languages Exclusion Approval Order* is tracked on an ongoing basis at a departmental level. The Department also encourages employees to acquire or improve second official language skills in order to advance their careers and possibly fill bilingual positions in the future as part of their personal development plans and in accordance with the revised Departmental Guidelines for the Learning of a Second Official Language, approved in 2009–2010.

The Department ensures that the workforce reflects the presence of both official languages communities in Canada.

Management Accountability Framework (MAF)

In the Round VII (2009–2010) MAF Assessment, Environment Canada significantly improved its overall performance compared to the previous year, receiving two "strong", fifteen "acceptable", two "opportunity for improvement" and no "attention required" ratings. The Department has built upon this success and developed a renewed MAF Action Plan. Produced annually, the Action Plan is based on departmental priorities as well as those identified by the Treasury Board of Canada Secretariat, and outlines actions to maintain or improve management performance. Progress against the Action Plan will be monitored periodically to help ensure that management performance meets expectations in MAF Round VIII.

Indicators of Environmental Sustainability

Environment Canada, Statistics Canada and Health Canada are working together to further develop and communicate national environmental indicators of air quality, greenhouse gas emissions, freshwater quality and protected areas. These indicators are reported in the Canadian Environmental Sustainability Indicators (CESI).

While some trends are declining in the context of the subject areas in which they apply, determining the overall status of these areas based solely on current and limited indicators is inherently difficult. These indicators provide instead a proxy of overall status with respect to these areas, as can best be determined at this time. The indicators are, however, continually being refined and updated so that they better represent what they are intended to measure for use by both policy makers and the public.

In addition, CESI brings together environmental information from federal, provincial and territorial governments, which share responsibility for environmental management in Canada. Consequently, the trends and values of these indicators are not solely attributable to Environment Canada's actions, but indicative of the environmental results achieved collectively by various levels of government as per their responsibilities for the environment.

The table below provides an overview of CESI and other measurements for key indicators of environmental sustainability.

Trend	Indicator	Overview
No trend	Air quality	Ground-level ozone and fine particulates ($PM_{2.5}$), two key component of smog, can cause harm to human health, including lung and respiratory problems. Nationally, our exposure to ground-level ozone has increased by 11% between 1990 and 2008, with a 3% decrease from 2007 to 2008. No trend was identified for $PM_{2.5}$ for the years 2000 to 2008 but we registered a 3% decrease from 2007 to 2008. Source: Environment Canada, Canadian Environmental Sustainability Indicators
No trend	Greenhouse gas emissions	Greenhouse gas emissions trap heat in the atmosphere and warm the planet, resulting in rising sea levels and more severe storms and heat waves. Canada's greenhouse gas emissions had grown rapidly from 1990 (592 megatonnes of carbon dioxide equivalent) to 2003 (741 megatonnes). The growth trend has slowed in recent years - emissions since 2003 have decreased by 0.8%. GHG emissions from 2007 to 2008 (734 megatonnes) decreased 2.1%. Source: Environment Canada, Canadian Environmental Sustainability Indicators
No trend	Freshwater quality	The ability of Canada's lakes, rivers, and streams to support aquatic life is a way of measuring water quality and the impact of water pollution. Of the 86 representative sites monitored across Canada from 2005 to 2008, and at 81 representative sites between 2004 and 2007[48], fresh water quality was rated as "excellent" at 6% of the sites. It was rated as "good" at 29%, "fair" at 46%, "marginal" at 16%, and "poor" at 3%. Source: Environment Canada, Canadian Environmental Sustainability Indicators
Improving performance	Protected Areas	Protected areas are lands or waters set aside to preserve habitats and natural landscapes and where human activity is limited. As of the end of December 2009, 9.72% (98,251,652.5 ha of Canada's landmass) was under protection. There has been a 14% increase in the overall area protected since 2004 and roughly an 80% increase since 1990. Source: Environment Canada, Canadian Environmental Sustainability Indicators
Declining performance	Biodiversity	The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is a group of experts responsible for identifying and assessing wildlife species considered to be at risk in Canada. As of June 2010, the status of 259 of the 602 at-risk species has been reassessed. Of those species, 35 (13%) have improved status and are either no longer at risk or are in a lower risk category, 67 species (26%) were placed in a higher risk category and 157 species (61%) did not change in status. Source: Committee on the Status of Endangered Wildlife in Canada

[48] Data for the period between 2004 and 2007 were used for stations where data was not available at the time of publication (Quebec, Manitoba, B.C., Alberta, Saskatchewan, PEI, and Yukon).